

B



# BIOENGINEERING (2022-23)

CES

Department Handbook Your Department at a glance

## THE FRESHER'S HANDBOOK IS COMPILED AND EDITED BV



INSTITUTE STUDENT COMPANION PROGRAMME



## 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.



## CONTENTS

About IIT Bombay	5-6
About BSBE	7
Address by Head of the Department	8
Address by Faculty Advisors	.9
Message from Institute Student Companion Team	10-12
Message from PG Academic Council	13
BSBE Lab Facilities.	14-17
Highlights of the Department	18
<u>Genvision</u>	19
BSBE Faculty	20-26
Staff	27
Student Wellness Centre (SWC)	28-30
Gender Cell.	31
BSBE Student Companion Team 2021-22	32-35
PGAC AND AURAA	
Student Alumni Relations Cell	37
Department Student Council 2021-22	38
Cultural and sports council	39
Placement team & Placements (2020-22)	40-41
Highlights from the year (2020-22)	41
Internship cell	42
BSBE Internships	43
Know your Seniors: M.Sc & M.Tech	44-47
Projects	48-49
Courses and grades	50
Cultural and sports achievements	51-53
<u>Callery</u>	54-56
Important Links	57

#### ABOUT IIT-BOMBAV



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 recognized 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 programmes. 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 programmes 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 programmes. 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 more than 15 hostels with in-house dining; the campus also provides excellent amenities for sports and other recreational facilities.

## **IIT-BOMBAV IN A GLANCE**



#### ABOUT YOUR DEPARTMENT

BSBE

The Department of Bio-sciences and Bio-engineering (BSBE) is a nodal center for applying science and engineering principles to understand the fundamental knowledge and applications in biology and biomedical engineering. The motive of the BSBE department is to create a pacified ambience to conduct scholarly activities in research and education with an aim to make an international impact and to produce future leaders in the field of Biosciences and Bioengineering.

The BSBE department is comprised of 26 permanent faculty members and 2 adjunct faculty members with a variety of backgrounds in basic sciences, applied sciences and in engineering with diverse teaching and research interests in biological sciences and biomedical engineering. The academic program currently consists of the M.Sc. in Biotechnology (supported by the Dept. of Biotechnology, Govt. of India), M.Tech. in Biomedical Engineering, integrated M.Sc.-Ph.D and PhD. Programs. The School of Biosciences was converted into the Bioscience and Bioengineering department in 2008, and it currently houses the Wadhwani Research Centre in Biosciences and Bioengineering (WRCBB), with a research being focused on understanding cell motility and cancer invasion. The new building, which currently comprises of about 30 labs, 2 seminar rooms and the department library, was inaugurated by Dr. A.P.J. Abdul Kalam in 2013. Website of the department: http://www.bio.iitb.ac.in/



## ADDRESS BY THE

#### HEAD OF DEPARTMENT

Hello, 2022 batch of Masters and PhD students... welcome to the Department, Institute, and of course, Mumbai.

Your arrival here in the IIT Bombay campus marks the beginning of an important step forward in your professional career. If past is any indication, the next 2 (or 5-6) years that you spend in this Institute will markedly shape your professional and personal profiles. Be it hostel life, academics, or coand extra-curricular activities - your experience is likely to be unlike anything that you ever imagined!

In case you experience turbulence, especially during the initial phase and with the course work, don't get alarmed: seniors in the department are generally helpful and considerate; they can perhaps make the transition smooth. Even the faculty are quite approachable.

The department, and in fact the Institute, provides immense freedom for every one of you to grow in a way that suits your personality, strengths, and aspirations. You will be pretty much on your own - no one micromanages you. It is completely up to you to decide how you use your time and the resources around you. With due apologies to Rowling, and tweaking what Dumbledore told Harry, "It is our choices that shape our future far more than our abilities." So, choose wisely.

On behalf of every one of us in BSBE, welcome... looking forward to interact with you.

> Dr. <u>Petety V. Balaji</u> Head Department of Biosciences and Bioengineering



## ADDRESS BY THE FACULTY ADVISORS





<u>Prof. Hari M Varma</u> (<u>M.Tech)</u>



<u>Prof. Neeta Kanekar</u> (<u>M.Tech)</u>



<u>Prof. Rajesh Patkar</u> (<u>MSc)</u> First of all, please accept heartiest congratulations on your acceptance to the Department of Biosciences & Bioengineering at IIT Bombay. It's a pleasure to welcome you all to this new academic year. As you must have already experienced by now, as soon as you step into the campus as a new student, you may be filled with a variety of feelings ranging from exhilaration to nervousness. Your interaction with fellow batch mates and seniors will help you to get settled into the new environment. The department as well as institute orientation meetings are designed to help you uncover the answers to questions you may have, and to provide you information about campus resources, academic program details, and other services. You may also seek help from our bio office staff to guide you through the various situations.

Since this program is designed for students from varied disciplines, each of you will have to take courses based on your background and requirement. Details will be provided in the department level orientation meeting. Please feel free to contact us in case of any questions with respect to courses, curriculum, seminar, project or anything else that you may deem appropriate. We would also like to encourage you to browse through the websites of individual faculty members and talk to your seniors to get an exposure to the research being conducted in the department so that you may choose an appropriate research project. Our campus has a plethora of options for co-curricular activities, so do try to make judicious use of them, without getting overly swayed by them. Often times, the new entrants think of getting into IIT Bombay as the end goal, while it should be considered as just a beginning.

Once again, welcome to the department. Hope you have an enriching experience here.

On behalf of the department, it is my pleasure to welcome you all to a wonderful academic journey of master's course at the department of Biosciences & Bioengineering. I hope you will discover that you are now a part of a diverse, interesting, sometimes challenging yet enthralling community in the department and institute. I believe you will find the right environment in the department that will nurture your inquisitive & young minds.

On behalf of everyone at the department, I wish you good luck for your intellectual adventure over the next two years. And want you to know that we will do our best to support and encourage you while you take this intellectual voyage. We are so happy that you took the decision to join us. Welcome again!

#### MESSGAE FROM

#### INSTITUTE STUDENT COMPANION TEAM

Dear new entrants,

Heartfelt congratulations for embarking on one of life's most memorable journeys - the journey of learning at IIT. On the behalf of our prestigious institute of IIT Bombay, team ISCP welcomes you aboard.

Give a pat on your shoulder for having achieved this feat. Your dedication, hard work and perseverance brought you here, and we know that your experience will lead you towards great opportunities. We can guarantee that your time here on this colossal campus will be exciting and knowledgeable. A degree will just be a small portion of what you will be leaving this institute with. You will also leave with beautiful memories of late-night conversations, interesting wing cultures, and crazy birthday parties (oh you are going to miss those!!). You will have the opportunity to mingle in various clubs and societies where individuals strive to become experts in their fields and devote endless hours. As a result, there will be many chances to learn inside and outside the classroom. So entering this new universe in itself presents both exhilaration and potential difficulties. This is where we will help you by providing the tips you need to handle these difficulties and enjoy your time at IIT Bombay.

Now, you should be thinking what on earth is this ISCP? 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 programmes. We are here to help you get familiar with the ways of IITB, guide you through your ups and downs and make sure that each voice is heard. You will become part of a culture where people want to perfect their craft and thus work day in and day out. Various events are organised by the cultural, technical, and sports clubs in the institute throughout the year. Managing these along with 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 want to help you in low and high tides as an act of giving back what they received from the programme. You can rely on the team for any advice or information on anything you are venturing out into, whether it be academics or extracurriculars, any issues that you are facing, any support or requirements that you want to raise as a part of the student community. And at last but undoubtedly not least just for regular interaction because that is all the programme holds at its core. The knowledge and the experience that our student companions have gained with their stay on the campus will help your transition become smooth. From campus tours to classroom lectures, from the grading system to completing the syllabus, from the profile to placements, from Schezwan Frankie to curry-pakora, they will be there for you.

We are sure that the last couple of years have been rough for many of you. But as we know that life moves on. So, make sure that you make the best out of your journey at IIT Bombay. Come and contribute to this vast store of knowledge and help it become more vibrant and colourful.

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

#### OVERALL COORDINATORS 2022-23







Abhishek Raman Civil Engineering <sup>p</sup> ramanabhi3503@gmail.com 213040033@iitb.ac.in

Prabhat Physics Department prabhat.70707@gmail.com 215120018@iitb.ac.in

Dipankar Kuli Earth Sciences dipankarkuli98@gmail.com 215060006@iitb.ac.in

#### CABINET MEMBERS 2022-23



Ananda Charan Khatua Department of Earth Sciences Charanananda55@gmail.com 215060023@iitb.ac.in 6370574104



Ashish Kumar Gautam Mobile No:7607369675 Department: Earth Sciences ashishkgautam2001@gmail.com Webmail: 215060015@iitb.ac.in

#### **MESSGAE FROM**

#### POST GRADUATE ACADEMIC COUNCIL



Welcome Freshers!

We all have gone through a lot in these past couple of years, so firstly congratulations to all of you for securing admission in one of the prestigious institutes in the country. IIT Bombay provides best exposure to its students in all the aspects, both academically as well as non academically. The skills you develop here, the interactions you have with people here will stay with you throughout your life. The post graduation demandssomething additional compared to the under graduation, more time, more effort, more determination and a ton of dedication. For meeting these primary requirements, often we find ourselves in a daunting situation.

In order to make your stay at IIT Bombay convenient, the institute has established the PGAC (Post Graduate Academic Council). Any technical necessity, any placement related assistance, any research queries or any academic grievances, you can always reach out to us. Each department has their own AURAA (Academic Unit Representative of Academic Affairs), whom you can approach directly in case you find any difficulties. Wishing you all a really convenient and productive IIT journey!

Regards, Mohit Meena



imr@iitb.ac.in Institute Masters Representative (2022-2023) Post Graduate Academic Council (PGAC) Contact no. : 8006080474

The department encourages research by allowing students to access state of art facilities inside the campus.

- Migh Performance Liquid Chromatography (HPLC)
- Sast Performance Liquid Chromatography (FPLC)
- Sast Protein Liquid Chromatography
- Concentric cylinder viscometer
- Bio Atomic Force Microscope (Bio AFM)
- Differential Interference Contrast Microscope (DIC)
- Sterilizable fermenter (12 litre capacity)
- 🗹 Automated hematology & coagulation analyzers
- Surface Plasmon Resonance
- ✓ Coniocal Laser Scanning Microscope
- ✓ High speed and ultra-centrifuges
- ✓ Circular Dichroism Spectropolarimeter
- Microarray printer Time Lapse Video Microscope with fluorescence attachments
- Gel Doc System
- MALDI TOF
- ✓ CD Spectrometer
- 𝒴 Deep Freezer
- Scintillation Counters
- ✓ Sonicators
- Service Microscope
- In the sequencer of the sequencer of the sequences of
- Inverted microscope
- Spectropolarimeter
- Centrifugal lyophilizers
- Spectrofluorimeter
- Spectrophotometers

In addition to these, equipment at CRNTS, SAIF and the Chemical Engineering department can be accessed and are irequently used by members of the department.

















#### LASER CUTTER



#### ROTAVAPOUR

BIOREACTOR











## HIGHLIGHTS OF DEPARTMENT

#### Weekly seminar

Seminar talks are held every Wednesday. Faculty, senior PhD students present their research work and students present scientific ideas or papers. BSBE department also hosts seminars by inviting eminent individuals known for their contribution to academics or industry. Find the seminar schedule at : http://www.bio.iitb.ac.in/bsbe-seminar-series

#### **Department library**

The department Library is an exclusive library that has a large collection of books, journals and non-book materials. Caters to the needs of large groups of users including more than 150 students, 50 faculty, 80 research scholars and equally large number of supporting staff. It is divided into two groups: Biotechnology Group and Biomedical Group. The department library is located in the lobby of the department (behind the office). The library can be used from 10 AM to 3.30 PM if it is not booked for any other purpose like seminars.

#### **Gnosis: BSBE Magazine**

'Gnosis' is the Greek word for 'Divine knowledge'. As the name suggests, this e-magazine is the holy grail of interesting articles in the field of Biosciences, Bioengineering and other relevant areas of interest. It is maintained by the students and acts as a platform for posting achievements and interesting events and research happening in our department. The magazine covers technical and non-technical events in the department. We even have a space for alumni and faculty to reflect upon. Website: http://www.bio.iitb.ac.in/~gnosis/.

#### **GENVISION**

Genvision is the annual department fest organized by the Symbiotek Council. Filled with fun activities like a treasure hunt, quizzes, and games, Genvision sees the participation of more than 500 students from all over India. It is an amazing platform where students are encouraged to think out of the box, push their horizons and learn from lectures by eminent scientists, visit the BSBE labs, and take home amazing gifts. The symbiotek council, which has been active since 1997, makes sure that genvision gets better every year and works to make it a huge success. Starting from inviting participants, making PR rounds to colleges around Mumbai to designing posters and certificates, every little detail is taken care of by the council comprising solely of the students. Symbiotek is nothing less than a family and is definitely something every student should be a part of. Here are some glimpses of GENVISION 2020- Translational and Sustainable Biology.

Website: http://www.bio.iitb.ac.in/~symbiotek/







#### Dr. Sandip Kaledhonkar

Mail ID - sandipk@iitb.ac.in Structural Biology, Cryo - Electron Microscopy

#### Dr. Neeta Kanekar

Movement Neuroscience and Rehabilitation Lab Mail ID - nkanekar@iitb.ac.in Motor Control, Neural Plasticity, Stroke Rehabilitation



#### Dr. Kiran Kondabagil

Molecular Virology Lab Mail ID - kirankondabagil@iitb.ac.in Lab webpage - https://sites.google.com/view/molecularvirology-lab/

#### Dr. Samir K. Maji

Protein Engineering and Neurobiology Lab Mail ID - samirmaji@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~maji/



#### Dr. Ashutosh Kumar

Protein NMR Lab Mail ID - ashutoshk@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~ashutoshk/

#### Dr. Ambarish Kunwar

Biophysics and Computational Biology Lab Mail ID - akunwar@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~akunwar/





## Dr. Petety V. Balaji

Glycobiology Lab Mail ID - balaji@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~balaji/

#### Dr. Anirban Banerjee

Bacterial Pathogenesis Lab Mail ID - abanerjee@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~anirban/





#### Dr. Rahul Purwar

Immunoengineering Lab Mail ID - purwarrahul@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~rpurwar/

#### Dr. Sreelaja Nair

Protein Engineering and Neurobiology Lab Mail ID - sreelaja@iitb.ac.in Embryonic deveopment using Zebrafish as a model



#### Dr. Prasenjit Bhaumik

Protein Crystallography Lab Mail ID - pbhaumik@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~pbhaumik/

#### Dr. Santanu Kumar Ghosh

Chromosome & Plasmid Segregation Lab Mail ID - santanughosh@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~santanu/





### Dr. Shamik Sen

Cellular Biophysics Lab Mail ID - shamiks@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~shamik/

#### Dr. Rohit Srivastava

Nanobios Lab Mail ID - rsrivasta@iitb.ac.in Lab webpage - https://www.nanobioslab.com/





#### Dr. Sanjeeva Srivastava

Proteomics Lab Mail ID - sanjeeva@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~sanjeeva/

#### Dr. Sushil Kumar

Precision Oncology Lab Mail ID - sushil.kumar@iitb.ac.in Cancer Biology, Cell signaling, Cancer Biomarkers, Big data analysis





#### Dr. Prakriti Tayalia

Cell and Tissue Engineering Lab Mail ID - prakriti@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~prakriti/

#### Dr. Hari Varma

Theoretical and Experimental Bioimaging Lab Mail ID - harivarma@iitb.ac.in Biophotonics, Tomography, Inverse Problems/





### Dr. Roop Mallik

Motor Protein Lab Mail ID - rmallik@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~roop/

#### Dr. Rohit Manchanda

Computational Neurophysiology Lab Mail ID - rmanch@iitb.ac.in Neuromuscular physiology and biophysics





#### Dr. Soumyo Mukherji

Biosensors and Bioinstrumentation Lab Mail ID - mukherji@iitb.ac.in Lab webpage https://www.bio.iitb.ac.in/~mukherji/web/index.html

#### **Dr. Dulal Panda**

Molecular Cell Biology Lab Mail ID - panda@iitb.ac.in Cell division, Microtubule dynamics, mitosis, cancer chemotherapy





#### Dr. Ranjith Pandinhateeri

Physical Biology Lab Mail ID - ranjithp@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~ranjith/



## Dr. Swati Patankar

Molecular Parasitology Lab Mail ID - patankar@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~patankar/

#### Dr. Rajesh Patkar

Host-Pathogen Interaction Lab Mail ID - rajeshpatkar@iitb.ac.in Lab webpage - https://www.patkar-lab.webnode.com





#### Dr. Debjani Paul

Microfluidics and Biological Physics Lab Mail ID - debjani.paul@iitb.ac.in Lab webpage - https://www.bio.iitb.ac.in/~dpaul/

#### **Dr. Prashant S. Phale**

Metabolic Engg. of aromatic degredation pathways Lab Mail ID - pphale@iitb.ac.in





## Dr. Nivethida Thirugnasambandan

Human motor neurophysiology, Noninvasive neuromodulation, Neural signal processing Lab Mail ID - nivethida@iitb.ac.in

**Dr. V.P.Soni** Mail ID - profvps@yahoo.com Adjunct Faculty



#### Dr. R.V.Hosur Hosur's Lab (TIFR, Mumbai) Mail ID - rvhosur53@yahoo.com Distinguished Visiting Professor





#### Dr. Madan Rao Physics of Active, Evolving Systems Mail ID - madan@ncbs.res.in Distinguished Visiting Professor

**Dr. K.K.Rao** Molecular Biology and Genetic Engineering Mail ID - kkr@iitb.ac.in **Superannuated Faculty** 





Dr. P.J.Bhat Molecular Genetics Lab Mail ID - jayadeva@iitb.ac.in Superannuated Faculty

### Dr. G.Subrahmanyam

Molecular Immunology and Cell Signalling Mail ID - gsm@iitb.ac.in **Superannuated Faculty** 





#### Dr. N.S.Punekar

Metabolism and Enzymology Lab Mail ID - nsp@iitb.ac.in **Superannuated Faculty**  "At the end of the day, you are answerable only to yourself... Have you done justice to whatever you feel you are capable of? What is it that you would like to see at the end of the day when all your work is done? What does having a fulfilled life mean to you? It may mean different things to different people, no problem... But whatever it is, are you taking steps to do something in that direction?"

(1972-2021)



Late Prof. Rinti Banerjee Nanomedicine

"Gone from our sight, but never from our hearts."

If tears could build a stairway,and memories a lane, we would walk right up to Heaven and bring you home again. We and our whole science community feels like a void in our heart which will perhaps never be filled. We will miss you and your charming smile. Keep shining forever.

- BSBE, IIT Bombay.

Dr. Rinti Banerjee was the Madhuri Sinha Chair Professor at the Department of Biosciences & Bioengineering at IIT Bombay. She had an MBBS from BJ Medical College Pune, a PhD in Biomedical Engineering from IIT Bombay and postdoctoral from the University of California, San Francisco. She was an expert in smart biomaterials, nanomedicine and drug delivery and has published over 100 papers in international journals including invited editorials & books. She had received several

awards in recognition of her work including the prestigious CDRI Award for Excellence in Drug Research 2015, NASI-Reliance Industries Platinum Jubilee Award for Biological Sciences 2014, National Award for Women Bioscientists in 2011 and Indo-US Frontiers of Engineering Award in 2010. She was a twice recipient of the Bill and Melinda Gates

Foundation Grand Challenges Exploration grant as well as twice recipient of the Samsung Global Research Outreach program. She was the Associate editor of J of Biomaterials &Tissue Engineering & is on the editorial board of Drug Delivery & Translational Research, Scientific Reports and many other international journals. Dr Banerjee's group focuses on the effects of nanostructured materials for healthcare applications, a multidisciplinary approach towards various aspects of Nanomedicine. The research of the group has led to many patented technologies like pulmonary surfactants aerosols, oral nanoparticles for triple negative breast cancer, pH responsive nanoparticles for anticancer therapy and micronutrient encapsulated cosmetics





Swati Vishwasrao Laboratory Assistant



Hrushikesh M. Nagwekar Sr. Technical Superintendent



Sumitra R. Rokade **Technical Superintendent** 



**Maheshwar S.** Naithani **Technical Superintendent** 



**Dr. Archana V. Shetty Technical Superintendent** 



Shikha Gupta **Technical** Superintendent



Anjali Raghunathan **Technical Superintendent** 



**Ashish Dubey** System Administrator



### Abhilasha S. Gujare

Jr. Administrative Assistant



**Arif Shaikh Casual Labour** 



Saumitra Lalsare Jr Technical



Multi skilled Assistant A (Retd)





Vinaykumar P. Mishra Multi skilled Assistant C (Retd)



**Yogesh Palande Casual Labour** 



**Anagha H. Bilay** 

Jr. Laboratory Assistant



H. B. Ingle Multi skilled Assistant C



**Rohit Bansode Casual Labour** 





**Dilip H. Kadam** 



**Dipak Rama Talekar Casual Labour** 

#### 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.

It is important to understand that students often lose their focus and give in to these pressures. If not attended to at the right time, this could lead to poor performance - both academically and personally.

To help you refrain from losing focus and being unhappy, the Counsellors at 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 counselor, students are helped to explore and express feelings, examine beliefs and ways of thinking about their present situation, reflect on patterns of behavior, and work toward making healthier and happier

#### APPOINTMENT

Appointments are available from 10:30 am to 5:30 pm Monday-Friday, and students are usually seen for 45 minutes, depending on demand. Students can make an appointment by mailing us at: wellness@iitb.ac.in.

Intake appointments are scheduled with students at times and dates convenient to them, depending on their academic commitments. In either case, the goal of the first meeting is to help the student identify the issues that are causing them the most concern.

Suppose a student wishes to continue in counseling. In that case, he/she usually continues to meet with the same counselor seen in intake or Walk-In.

## SERVICES

#### Student Wellness Centre provides

1. Individual Counselling...

- student get space to talk with no pressure
- confidentiality is maintained
- no judgment, criticism, and assumptions
- you can unburden yourself

Counselors will...

- respect you and your problems
- will help you to consider the different options and make choices
- surely will make an attempt to reduce the problem
- will intervene with the right people to help you if required
- 2. Psychological Assessment

In some cases where more precise diagnoses are required, we conduct psychological assessments. These tests are administered by a trained psychometrician. These tests help all those concerned with the student's wellbeing to decide upon the best possible intervention.

3. Workshops and Events

The Wellness Centre also organizes different workshops and events during each academic year. The seminars and events are organized on various topics related to mental health. They are based on the students' needs, like dealing with stress, time management, relationship issues, etc. We also have a training program for mentors where practical mentoring skills are demonstrated and sharpened, updates of which can be seen on www.facebook.com/icareiitb.

The lockdown imposed by the government was applied to three main areas. Those are (a) Physical movement out of the home, (b) social distancing when outside the house, and (c) the restricted availability of most public services while sparing essential services. This was to curb the spread of infection, but there was a sudden and drastic alteration in the daily routine. Many millions were stranded in boarding houses and rental apartments, without work, and far from home.

Many of them suffered from behavioral and mental disorders while at home, with their families, or away from them. For instance; Anxiety, Depression, Loneliness, Lack of concentration, panic, fear, apprehension of the future, financial strain, and the list continues.

SWC Website: http://www.iitb.ac.in/swc/en

#### SWC & THE COVID-19 ERA



Mental health is a crucial aspect that needs to be addressed during this lockdown, as all modes of communication revolve around the virus. So to combat these stressful conditions, the counselors at SWC always stand with their students to help them out with any mental trauma they are facing. To help the students facing problems, SWC has started TELEPHONIC COUNSELING DURING LOCKDOWN. If you wish to talk to a counselor over the phone, kindly contact us on the given numbers during the below-mentioned timings: Timings: 11 am to 1 pm and 4 pm to 6 pm.

Ms. Lavina Lewis: 9769340435

Even if you are feeling down, remember you will get through this, don't hesitate to contact Institute's trained counselors.





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. The IIT Bombay Gender Cell (GC) inquiries into complaints of sexual harassment through its Internal Complaints Committee (GC-ICC). The GC and GC-ICC strive to work towards an egalitarian environment where men and women are afforded equitable treatment and equality of opportunity conducive to their professional growth.

#### What kind of complaints does the Gender Cell address?

The Gender Cell's Internal Complaints Committee inquiries into complaints of sexual harassment through. Sexual harassment includes any one or more of the following unwelcome acts or behavior:

- 1. Physical contact and advances;
- 2.A demand or request for sexual favors;
- 3. Making sexually colored remarks;
- 4. Sending, displaying, or showing pornographic material in physical form or through any electronic media;
- 5.Any other unwelcome physical, verbal or non-verbal conduct of sexual nature, and
- 6. Any other acts or omissions that are of like nature to the instances above.

Gender Cell Website: http://www.gendercell.iitb.ac.in/



#### BSBE STUDENT COMPANION TEAM

#### 2021-22

#### DEPARTMENT COORDINATORS

M.TECH





Abhishek Rauniyar Bio-Medical Engineering 213300016@iitb.ac.in Abhishekrauniyar.iitb@gmail.com 7091777922 Preeti Rawat Biotechnology 215300006@iitb.ac.in garhwalirawat2001@gmail.com 8851618615

Welcome to IIT Bombay!

It is a fantastic place and Biotechnology and Bio-medical engineering are great courses indeed. Whilst institute life is great, settling in and getting into the swings of things during initial days can be tough. It's a totally new phase with a new beginning and new difficulties but you can face them by having more strength and selfconfidence. But we, alongside all the support available will stand to help you out. We assure our frequent availability to listen to your problems and help you in tackling the same.

Besides lots of hard work, you will find some entertainment too like sports, speeches, poems and art competitions, debates and refreshing events like TechFest and MoodIndigo. Create, perform and experience with a high level of comprehension and appreciation.

Best Wishes Preeti Rawat and Abhishek Rauniyar

#### STUDENT COMPANIONS

#### M.Tech



A warm-hearted, generous, and delightful delhiite with an open-mind and some good humour. If you want to share your accomplishments and tragedies in life, she is your buddy. Where there is Anjali, there will be a party. Mobile no. - 9871214229 Mail ID - anjaliarya500@gmail.com

Anjali Arya

She is from Pune. Her sweet voice and wit makes her your go-to person to talk. She believes in being nonjudgemental to every problem and will be your good shopping partner! Mobile no. - +91 72762 45324 Mail ID - badhevishakha@gmail.com



Vishakha Kiran Badhe



Devanshi Gokani

Your most polite, soft spoken and humble gujju senior. She will always lend you an empathetic ear and work out your problems with patience. She likes to sketch and always ready to rock some garba in the club. Mobile no. - 8460038790 Mail ID - devanshigokani18@gmail.com

He is a jovial person from Tamil Nadu. Speaks Tamil and English, believes in "Life is Food", and literally a selfie king. He is very warm and approachable and will show a great deal of patience while handling problems. Gives solutions in a different perception for personal or any kind of issues. Mobile no. - +91 76392 73373

Mail ID - gokulkrish0999@gmail.com



Gokulakrishnan M



She is enthusiastic and keen about learning new things and also has a willingness to share skills, knowledge and expertise. She is an active and patient listener and respects boundaries. She's also an aspiring globe-trotter and loves to explore new places. Above all she has spent her childhood in Mumbai and can be duly called a quasi-Mumbaikar. When in need of a free tour guide, she's just a knock away.

Upasana Ghosh

Mobile no. - 6290729967 Mail ID - upasanatiyaghosh@gmail.com

He is a practical minded person who takes great pleasure in discussing Indian and world politics. He loves travelling and is quite adventurous, so he can be a good companion for visiting new places. He is composed and pretty supportive, so feel free to approach him with any kind of problem. Also if you want to play a cricket or football match and you are short of players, he is just a call away. Mobile no. - 8250061501 Mail ID - prithwi0601@gmail.com



Prithwiraj Mukherjee



Genius, Billionaire (in coming future), Good boy, Philanthropist is what perfectly defines him. A true hard worker and a bit of a smart worker. He loves to complete all his tasks on the very last day of dead line but yes before dead line. He is easy to be approached. Mobile no. - 7667019918. Mail ID - 215300008@iitb.ac.in,

prasoonkumardd@gmail.com

Prasoon Kumar Mishra



**Binay Aswal** 

Hey Juniors.

You can consider yourself lucky to get to be part of this prestigious department, and the fact that the campus is eventually being pumped back to life and you will get to see it in all it's glory! I am an ENFP by personality. These are the chirpy, enthusiastic individuals full of curiosity and awe even for the mundane. With the perception and communication skills that we carry, you can always feel free and comfortable being around us. So be it scurrying around the campus in the name of exploration, or the serious, deep, personal talks, I can be a good candidate for company and guidance. Don't hesitate to reach out anytime!

Mobile no. - 9821526926 Mail id - binayaswal@gmail.com

Firstly, many congratulations for joining IIT Bombay, a dream college for many, and welcome to the department! People say I have a warm smile and helpful nature. Having had the most experience (among our batch) staying on campus, I am both able and more than willing to help you out with any problem you might face throughout your stay here. You can always seek my help regarding issues related to academics or otherwise. Mobile no. - 9474339853



Sumit Rakshit



Mail id - rakshitsumit17@gmail.com

**Rupam Mandal** 

Welcome to India's one of the most famous institutions, IIT Bombay. Your efforts behind the entrance exam (i.e. IIT-JAM) has been fruitful evidently. It's time to start a new journey. Meet people from different sides of this country, enrich yourself in different cultures and of course with academic skills. Wish you all the very best and Congratulations once again for being able to part of the large IITB community. Mobile no. - 9635184736, 9609514079(wp) Mail ID - rupamrmr@gmail.com, . 215300019@iitb.ac.in

### POST GRADUATE ACADEMIC COUNCIL

PGAC core team members from the department

### Academic Unit Representative for Academic Affairs (AURAA)

An 'AURAA' represents the Department in the Post-Graduate Academic Council (PGAC). Academic issues faced by students will be taken up to the General Secretary Academic Affairs (GSAA-PG) through Institute Master's Representative (IMR). Together, they are here to make your stay comfortable by helping you sort out your academic issues.





R. Vinayak M.Tech Academic Unit Representative for Academic Affairs (2022-2023)

Md.Shabab Anwar M.Sc. Academic Unit Representative for Academic Affairs (2022-2023)

#### Institute Secretary for International Relations (ISIR)

The institute has an International Relations Office (IR office) to oversee and coordinate the international activities on campus and facilitate the opportunities for students to come to IIT Bombay, or for IIT Bombay students to travel to partner institutes. The goal is to establish relationships between foreign universities and institutions and IIT Bombay and to help define the scope of such relationships through appropriate Memoranda of Understanding (MoUs). The IR office promotes exchange programmes for students through student exchange agreements with partner institutions, and arrange and administer foreign language courses for students and staff of IITB as well. The position of ISIR-PG is a common post in PGAC and HA Council to help the PG students communicate with the IR Office.



Sudeepta Singh M.Sc. Institute Secretary for International Relations (2022-2023)
# STUDENT ALUMNI RELATION CELL



SARC is a student body run under the guidance of the Dean ACR Office, IIT Bombay. It works with a vision of bringing the alumni & student communities of IITB together to create a synergy of ideas, respect, knowledge & everything that our Institute stands for. Its Events and Initiatives include:

- Alumination: Flagship Event of Student Alumni Relations Cell
- Student Alumni Meets: Networking sessions in various alumni chapters
- Phonathon: Telephonic marathons to connect with alumni
- Reunions: The most awaited yearly alumni reunions
- Alumni Sports Weekend: A fun-filled sports weekend for the alumni and students
- Institue Valedictory Function: The last event of an IITB student's insti life
- ProVachan: Non-core fundae talks by our very own alumni!
- SARCasm: Head scratching online cryptic hunts for the students
- Core Talks: Department-specific talks from the experts, our own alumni!
- ASMP: Alumni Student Mentorship Programme
- ILP: Industrial Learning Programme
- HATS: Hostel Alumni Team Stewardship
- Institute Yearbook: "Thousand Thoughts, Million Memories, Infinite Feelings."



Abhishek Rauniyar Department Alumni Secretary (2022-2023)

## DEPARTMENT COUNCIL

#### **Department General Secretary**



Bhawna PhD

MSC REPRESENTATIVE





**Md. Shabab Anwar** 

PhD REPRESENTATIVE

Piyush Kumar



**Rajesh Kumar Gop** 

# cultural council



Apart from academics, IIT Bombay gives you every opportunity and motivates you to participate in the vast cultural community. This is where you can showcase your talents and develop new passions by becoming an active member of various clubs. Throughout the year, they organize numerous activities to keep you on your toes. BSBE has actively participated in these events and performed exceptionally well. Hence we encourage all students to come forward and participate in these events and make BSBE shine even more. Make your time in IIT a genuinely enriching experience. IIT Bombay will never let you get bored as it has so many platforms where you can discover new interests at the departmental and institutional levels. BSBE did an excellent job by achieving the overall champions trophy in PG Cult 2018-19 and has shown extensive participation in PG Cult 2019-2020 Phase 1. Hope to expand the cultural team by warmly welcoming freshers.



Piya Rawat M.Sc. Biotechnology



Vaibhav Raj M.Tech. Bio-medical Engineering



Manisha M.Sc. Biotechnology

## SPORTS COUNCIL

#### **Sports Secretary**



Binay Aswal M.Sc. Biotechnology



Prithwiraj Mukherjee M.Sc. Biotechnology

#### **Sports Convener**



Piyush Kumar M.Tech. Bio-medical Engineering

## PLACEMENT TEAM

#### Recruiters













#### **Company Coordinator**



Tanay Naik M.Tech. Bio-medical Engineering naiktanay0209@gmail.com 9516900339

> Department Placement Coordinators







Sanatan Panda M.Tech. Bio-medical Engineering sanatanpanda19@gmail.com 9556712659

# **BSBE PLACEMENTS**

#### Placement Record of M.Tech Students (2020-22) :

Name	Company	Job description
Nayan Jyoti Das	A U Small finance bank	Sr. Software engineer
Singh Ankit Brijpal	Selfemployed	Education
Karishma Ghosh	Innoplexus Consulting Services Pvt Ltd	Associate data engineer
Yaadwinder Singh	ImpactGuru	Management Trainee
Rajiv Kumar	CC Tech	Data Scientist
A Akshara Padmini Chandra	Orbees medical	Associate consultant
Renamala Steiney Lancet	Marsh Mclennan	Data Engineer
Simhadri Aditya	Pricewaterhouse Coopers (PwC)	Associate consultant

## HIGHLIGHTS OF THE VEAR

#### Students continuing on to PhD (2020-22)

Name of the student	Institute or organization name	Program
Divyanshu Darshna (M.Sc)	IIT Delhi/IIT Roorkee	Ph.D.
Pooja Yadav (M.Sc)	IIT Bombay	PhD
Shreya Chakraborty (M.Sc)	inStem, Bangalore	Research Associate
Arpan Banerjee (M.Sc)	IIT Bombay	MSc. & Ph.D Dual Degree
Prasoon Prakash (M.Sc)	Washington state university	Fully funded MS (thesis) in Kinesiology [Lab:
		Cognitive Motor Neuroscience Lab]
Ishika Gupta (M.Tech)	IIT Bombay	Ph.D.
Buddhadev Goswami (M.Tech)	IIT Bombay	PhD

## INTERNSHIP CELL

The internship cell is a part of the Placement cell that provides a well-organized and structured portal to offer internships to students during their summer and winter vacations. It is a gateway to the first-hand experience in the professional world that helps in forging fruitful and sustained associations with various institutes and companies across India and abroad.

Experience gained by students in this duration hones their research outlook and technical skills while preparing them to undertake any future endeavors in various organizations. Internships in universities and companies in multiple fields (R&D, analytics, IT, finance, and industry) benefits students in their respective ways. In a way, students get to explore, learn and adapt skills that prepare them to define their career ahead.

# BSBE INTERNSHIP(2021-23)

Name	Institute/Company
Prasoon Kumar Mishra	National Institute of Biomedical Genomics (NIBMG), West Bengal
Manisha	CSIR-CDRI
Shilajit Roy	AIIMS, Delhi
Achyuta Nanda Sahu	CCMB summer training program 2022
Piyush Porwal	National Institute of Technology (NIT), Rourkela via IAS-SRFP 2022
Upasana Ghosh	ACBR, Delhi via IAS-SRFP 2022 & CSIR-IMMT
Binay Aswal	JNCASR- SRFP
Pramita Kundu	Oriental Institute of Technology, Vidyasagar University
Anvita Pant	The University of British Columbia, Vancouver & Bioinformatics Institute (BII), Singapore
Rupam Mandal	IISc, Bangalore
Arif Jaman	IISc, Bangalore
Ravi Sharma	IIT Bombay, Protein Crystallography Lab
Preeti Rawat	AIIMS, Delhi & Institute of Advanced Study in Science and Technology, Guwahati

There were various other notable and renowned institutes that were ready to take M.Sc. Biotechnology students as interns. However, unfortunately due to the unprecedented scenario due to Covid-19 and the following inevitable lockdown implemented by the Government, those internship offers didn't see the daylight.









प्रारम् उन्हें दिवर, वास सरहार स एक खो शहित संसंस An Armstein Selfe के जनव DIS. Compared at led

An Autonomous institute under DAE, Government of India

### KNOW YOUR SENIORS: M.SC.



Preeti Rawat



Prasoon Kumar Mishra



Upasana Ghosh



Sumit Rakshit



Arabinda Saha



Anvita Pant



**Piyush Porwal** 



Sudeepta Singh



Arif Jaman



Piya Rawat



Abhimanyu Ray



**Binay Aswal** 



Manisha



Dhruba Jyoti Maji



Pramita Kundu



Sudeep Nath

### KNOW YOUR SENIORS: M.SC.



Krishna Samatia



Ravi Sharma



Nishi Kumari



**Ragini Baghel** 



Sourin Bag



Rupam Mandal



Shilajit Roy



Seema



Harshita Panchal



Achyuta Nanda Sahu



Prithwiraj Mukherjee



Md. Shabab Anwar

## KNOW YOUR SENIORS: M.TECH..



Anusuya Narayanan



Anjali Arya



Piyush Kumar



**R** Vinayak



Vishakha Kiran Badhe



Devanshi Gokani



Gokulakrishnan M



Vaibhav Raj



Mohammed Ansha A A



Ojaswini Bhardwaj



Rasmita Rameshchandra Ardu



Tanay Naik



Anoop Shaji



Anusri U



Aparna Chauhan



Shambulingayya

## KNOW YOUR SENIORS: M.TECH..



Sanatan Panda



Aditya Dutta



Spandan Kaushik



Chinaithi Narzary



Trinetra M Mensinkai



Krishna Shankar



Dhanush B



Abhishek Rauniyar

## PROJECTS : M.SC. BIOTECHNOLOGY

Name	Project Guide	Project Title			
Prasoon Kumar Mishra	Dr. Prasenjit Bhaumik	Understanding the molecular details responsible for the activity of glutamate dehydrogenase.			
Manisha	Dr. Kiran Kondabagil	Deciphering the role of virus-coded proteases in giant virus life cycle.			
Shilajit Roy	Dr. Santunu Kumar Ghosh Elucidation of functions of RSC chromatin remodele pathogen, Candida albicans				
Achyuta Nanda Sahu	Dr. Sandip Kaledhonkar	Isolation and characterization of Bacteriophage from natural resources			
Piyush Porwal	Dr. Sreelaja Nair	Identification of localization elements in maternal RNAs necessary for normal development in zebrafish embryos			
Upasana Ghosh	Dr. Prakriti Tayalia	Drug delivery for Cancer Immunotherapy via Silk Nanoparticles			
Prithwiraj Mukherjee	Dr. Shamik Sen	Therapeutic targeting of the glycocalyx in breast cancer			
Binay Aswal	Dr. P.V. Balaji	Annotation of protein function using Bioinformatics			
Abhimanyu Ray	Dr. Samir K. Maji	Liquid-liquid phase separation of alpha-synuclein			
Pramita Kundu	Dr. Rajesh Patkar	Role of cell wall modifying enzyme DSE2 in cytokinesis			
Seema	Dr. Rajesh Patkar	Role of ACC Synthase paralog in Blast fungal pathogenesis			
Harshita Panchal	Dr. Rajesh Patkar	Role of a putative pheromone factor 'a' in Candida glabrata patho- biology			
Sudeepta Singh	Dr. Kiran Kondabagil	Jumbophages: Isolation, characterization, and sequencing (whole genome/metagenomics)			
Anvita Pant	Dr. Sanjeeva Srivastava	Mass spectrometry based proteomics investigation of breast ca patients			
Dhruba Jyoti Maji	Dr. Shamik Sen	Clycocalyx as an energy source under nutrient deprivation			
Arabinda Saha	Dr. Ashtosh Kumar	Drug-lipid interactions and its role in liver injury			
Sumit Rakshit	Dr. Anirban Banerjee Mechanism of Ubiquitin mediated killing of intracellular				
Sourin Bag	Dr. Prashant S Phale	Metabolic Engineering: cloning, expression of salicylate 1- hydroxylase operon in Pseudomonas sp. CSV86			
Ragini Baghel	Dr. Sreelaja Nair	Understanding cerebellum development and function using optokinetic and optomotor assays in zebrafish			
Krishna Samatia	Dr. Samir K Maji	Establishing mechanism of liquid to solid transition by proteins.			
Rupam Mandal	Dr. Prashant S Phale	Development of consortia for the microbial remediation of chloro and nitro aromatics pollutants or Biosurfactant production by aromatic degrading microbes.			
Arif Jaman	Dr. Santanu K. Chosh	Understanding functions of a chaperone of histone 3 variant in chromosome segregation.			
Sudeep Nath	Dr. Prashant S. Phale	Cloning, expression and characterization of MetA porin, proposed to be involved in the Carbaryl degradation.			
Piya Rawat	Dr. Shamik sen	Role of S20G mutation in amylin : implication in diabetes			
Ravi Sharma	Dr. PV Balaji	Functional annotation of proteins using machine learning			
Nishi Kumari	Dr. Swati patankar	Trafficking of proteins to the apicoplast, an endosymbiotic organelle of Toxoplasma gondii			
Preeti Rawat	Dr. Swati Patankar	Structure, function and biological role of the apicomplexan nuc transporter importin alpha			
		transporter in iportin alpria			

## PROJECTS : M.TECH. BIOMEDICAL ENGINEERING

Name	Project Guide	Project Title
Tanay Naik	Dr. Soumyo Mukherji	Optimization of processes for development of biosensors.
Devanshi Gokani	Dr. Neeta Kanekar	Estimation of the time of impact for a predictable perturbation.
Anjali Arya		
Gokulakrishnan M	Dr. Swati patankar Dr. Ashutosh Kumar	Targeting the latent stages of Toxoplasma gondii.
Gokulakrishnan M	Dr. Ashutosh Kumar	Drug membrane interaction and its implication
Ojaswini Bhardwaj	Dr. Sreelaja Nair	Expression profiling of microRNAs in early stage zebrafish embryos
Sanatan Panda	Dr. Prakriti tayalia	RNA seq data analysis for autoimmune diseases and cancer.
Aparna Chauhan	Dr. Sanjeeva Srivastava	Meta analysis of human brain disease proteomics data to enhance peptide biomarker discovery
Dhanush B	Dr. Sanjeeva Srivastava	Integrated Omics Profiling of COVID-19
Anusuya Narayanan	Dr. Shamik Sen	Tissue Adhesives for wound healing
R Vinayak	Dr. Rohit Srivastava	Design and Development of a solid state point of care testing device for Microalbuminuria.
Anusri U	Dr. Debjani Paul	Droplet microfluidics chip optimization
Andshio	Di. Debjani Paul	Comparison of Antimicrobial properties of silver, copper, and
Vaibhav Raj	Dr. Rohit Srivastava	graphene Nanoparticles and various combinations thereof
raibharnaj	Diritonicontastata	against super bugs.
Piyush kumar	Dr. Rohit Srivastava Microneedles based Transdermal patches for wrinkl	
Chinaithi Narzary	Dr. Rohit Srivastava	Nano particle mediated drug delivery for Psoriasis
Mohammed Ansha A A	Dr. Kiran Kondabagil	Bacteriophage design and evolution
Trinetra M Mensinkai	Dr. Hari Varma	FPGA based correlator using multi tau algorithm
		"Design and Development of a novel product for an easy and
krishna shankar	Dr. Rohit Srivastava	confirmatory localisation of cottonoids, swabs and Dressing
		materials in the surgical field to prevent Gossypiboma."
Vishakha Badhe	Dr. Prakriti Tayalia	Electrospun 3-D nanofibre scaffold
Spandan Kaushik	Dr. Kiran Kondabagil	Prediction of host of bacteriophages in metagenomic samples
Anoop Shaji	Dr. Rohit Srivastava	Development of a nano-drug delivery system for oral cancer Immunotherapy
Abhishek Rauniyar	Dr. Prasenjit Bhaumik	Study on cellulases
Rasmita Ardu	Dr. Nivedita Thirugnanasambandam	To be finalised later
Shambulingayya	3 Year MTech Program	To be finalised later

## COURSES AND GRADES

The courses offered for the PG Programmes are assigned certain credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course.

IIT Bombay follows a letter grading system. Based on the combined performance in all assessments, each student is awarded a letter grade in every course taken as per the curriculum. These letter grades carry a quantitative or numeric equivalent called the Grade Point. The letter grades, their equivalent grade points and description is given below:

Letter Grade	Grade Point	Letter Grade	Grade Point
AP	10	FF	0 (Fail- Re-examination)
AA	10	FR	0 (Fail- Repeat the course)
AB	9	DX	0 (Attendance below 80%- Repeat the course)
BB	8	PP	Pass
BC	7	NP	Not Pass
CC	6	AU	Audit
CD	5	II	Incomplete (awarded on medical grounds)
DD	4	DR	Dropped (course has to be cleared in subsequent semesters)
30.9	10409123-2	W	Withdrawn

The performance of a student in a semester is indicated by a number called **Semester Performance Index** or **SPI**. Suppose, in a given semester a student has taken five courses having credits C1, C2, C3, C4, C5 and his/her/their grade points in those courses are G1, G2, G3, G4, G5 respectively, then SPI is calculated as:

 $SPI = \frac{C1G1 + C2G2 + C3G3 + C4G4 + C5G5}{C1 + C2 + C3 + C4 + C5}$ 

The **Cumulative Performance Index (CPI)** is calculated in the same manner as SPI by taking into account grade points obtained in all the courses taken by the student since he/she/they entered the Institute.

**Audit course** - A student who wants exposure to a course, without the rigors of obtaining a good grade, may audit a course. The grade awarded is 'AU' which does not carry any grade points and therefore does not figure in SPI/CPI calculations. The course will not carry any credits.

# CULTURAL ACHIEVEMENTS

Name of the Person	Name of the event Participated	Prize Awarded
Preeti Rawat	Online Modelling-Photgraphy (Fashion)	Sp. Mention
Binay Aswal	read and act (dramatics)	1st
U Anusri	Logo redesign (design)	1st
Sudeepta Singh	Logo redesign (design)	2nd
Jaydeep Das	Logo redesign (design)	3rd
Nayan Jyoti Das	Wanderlust (Fine Arts) Ph. 1	1st
Sudeepta Singh	On The Rocks (Fine Arts) Ph. 1	3rd
Manisha	Abhivyakti: Story writing (Indian Languages) Ph.1	1st
Haimanti Mukherjee	Mashed (Music) Ph. 1	2nd
Buddhadev Goswami	Comedy Replica (Comedy Cons) Ph. 1	1st
Prasoon Kumar Mishra	Comedy Replica (Comedy Cons) Ph. 1	2nd
Binay Aswal	Comedy Replica (Comedy Cons) Ph. 1	Sp. Mention
Sudeepta Singh	DANCE (Prop-er Twirls) ph 1	2nd
Arabinda Saha	100 Hours (Phase 1)	2nd
Binay Aswal	Mr. and Mrs. Personality (Fashion) Phase 1	3rd
Arabinda Saha	Abhivyanjana (Indian Languages) Informals Phase 2	Special mention
Anvita Pant	Spell bee (Literary Arts) Informals Phase 2	2nd
Parijat Das	Cartoon it (Fine Arts) Informals Phase 2	2nd
Karishma Ghosh	Cartoon it (Fine Arts) Informals Phase 3	2nd
Sudeepta Singh	Cartoon it (Fine Arts) Informals Phase 4	3rd
Prasoon Kumar Mishra	Tasveer (Photgraphy) Informals Phase 2	2nd
Buddhadev Goswami	Either Fry or Roast (Comedy Cons) Informals Phase 2	1st
Prasoon Kumar Mishra	Either Fry or Roast (Comedy Cons) Informals Phase 2	3rd
Aparna Chauhan	Unveil the Hidden (Speaking Arts) Informals Phase 2	1st

#### SPORTS ACHIEVEMENTS

Hey there! Just like the culturals , our department is known for it's rich sporting culture. Over the years, we have taken the top spot time after time in the PG General Championship (PGGC), and have also come on top as the winners last year in the Virtual PGGC. The department gave its best even when things were tough (and online :P). We are hopeful that with genuine sporting spirit and a burning desire to compete, you'll represent our department in various sports and will play (pun fully intended!) an active part in maintaining its legacy.

> Welcome aboard! - Sports Council

2021 VIRTUAL PGGC			
Event Name	Participants	Position	
Road Runner, Women's	Karishma Ghosh	1 <sup>st</sup> (Winner)	
Road Runner, Men's	Binay Aswal	2 <sup>nd</sup> (Runner up)	
Knight & Light (Boy's)	Aditya Dutta, Bhavik Ashwin Shah, Divyanshu Darshna, Yaadwinder Singh, Trinetra M	2 <sup>nd</sup> (Silver)	
Knight & Light (Girl's)	Rajkumari Sharma, Preeti Rawat, Piya Rawat, Aparna Chauhan, Bhawna	3 <sup>rd</sup> (Bronze)	

#### Overall Virtual PGGC 2021 Champion: BSBE

Intra-departmental Cricket Tournament		
Finalists	M.Tech & PhD	
Champion PhD Team		





#### **Intra-Departmental Cricket Tournament**





# GALLERV: CULTURALS-ONLINE



\*IN MIS Leams\*

Professor- Raise your hand if u have any question





























# Pandemic couldn't stop us RCCKING

# GALLERV: CULTURALS



# GALLERV: SPORTS











# IMPORTANT LINKS

Useful Links:	
BSBE Website	http://www.bio.iitb.ac.in/
ISCP Website	https://gymkhana.iitb.ac.in/~scp/scp/index.html
All Students Activities	https://gymkhana.iitb.ac.in/
<u>Grading policies</u>	https://gymkhana.iitb.ac.in/~scp/scp/pdfs/grading.pdf
Student Wellness Center	http://www.iitb.ac.in/swc/en
<u>Gender Cell</u>	http://www.gendercell.iitb.ac.in/
<u>Library</u>	http://etd.library.iitb.ac.in/etd/Etd_View
<u>Placements</u>	http://placements.iitb.ac.in/
Internships	http://placements.iitb.ac.in/internship/index.html
SARC	https://www.sarc-iitb.org/

#### Email and wi-fi related links:

Software Co	enter	https://w	ww.cc.iitb.ac	<u>in/</u>		
Connect	Webmail	(IITB	email	interface)	with	<u>g-mail</u>
http://homepages.iitb.ac.in/~yatindestel/docs/GPO%20in%20Gmail.pdf						

#### **Facebook links:**

Buy and Sell @ IITB	https://www.facebook.com/groups/buysell.iitb/
Symbiotek club	https://www.facebook.com/symbiotek.org/
BSBE Sports	https://www.facebook.com/BSBE.Sports/
ISCP Facebook Page	https://www.facebook.com/iitb.iscp/

#### **Useful Apps:**

InstiApp <u>m-indicato</u>r <u>MYBYK and Yulu, PayTM,</u> <u>Phonepe, Gpay, Tez</u> Info about events, mess menu, placement blog, and maps Navigate through entire Mumbai with ease Cycle rentals

#### **Emergency numbers:**

**Note:** The numbers inside the brackets are extension numbers. If you are calling from a landline inside IIT Bombay, use only the 4 numbers in the brackets.

Ambulance	022-2576(1101/1110)
Y Point Gate	022-2576(1121)
Hospital	022-2576(7051)
<u>Security</u>	022-2576(1100)
Main Gate	022-2576(1123)
Quick Response Team	9167398598/9167398599/9833337979/9833338989
ITB related questions on Quora : https://www.quora.com/topic/Indian-Institute-of-	
Technology-Bombay-IITB	

You have reached the end of the document.

Thanks

You are now all set to kickstart your wonderful 2 years of life at IIT Bombay. Cheers!!



\*