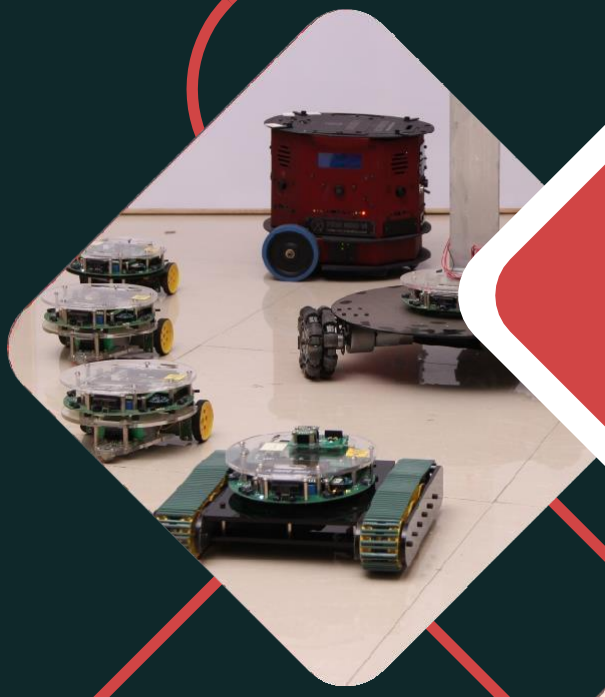
Department Handbook

2022 - 2023

SysCon iitb
Systems & Control



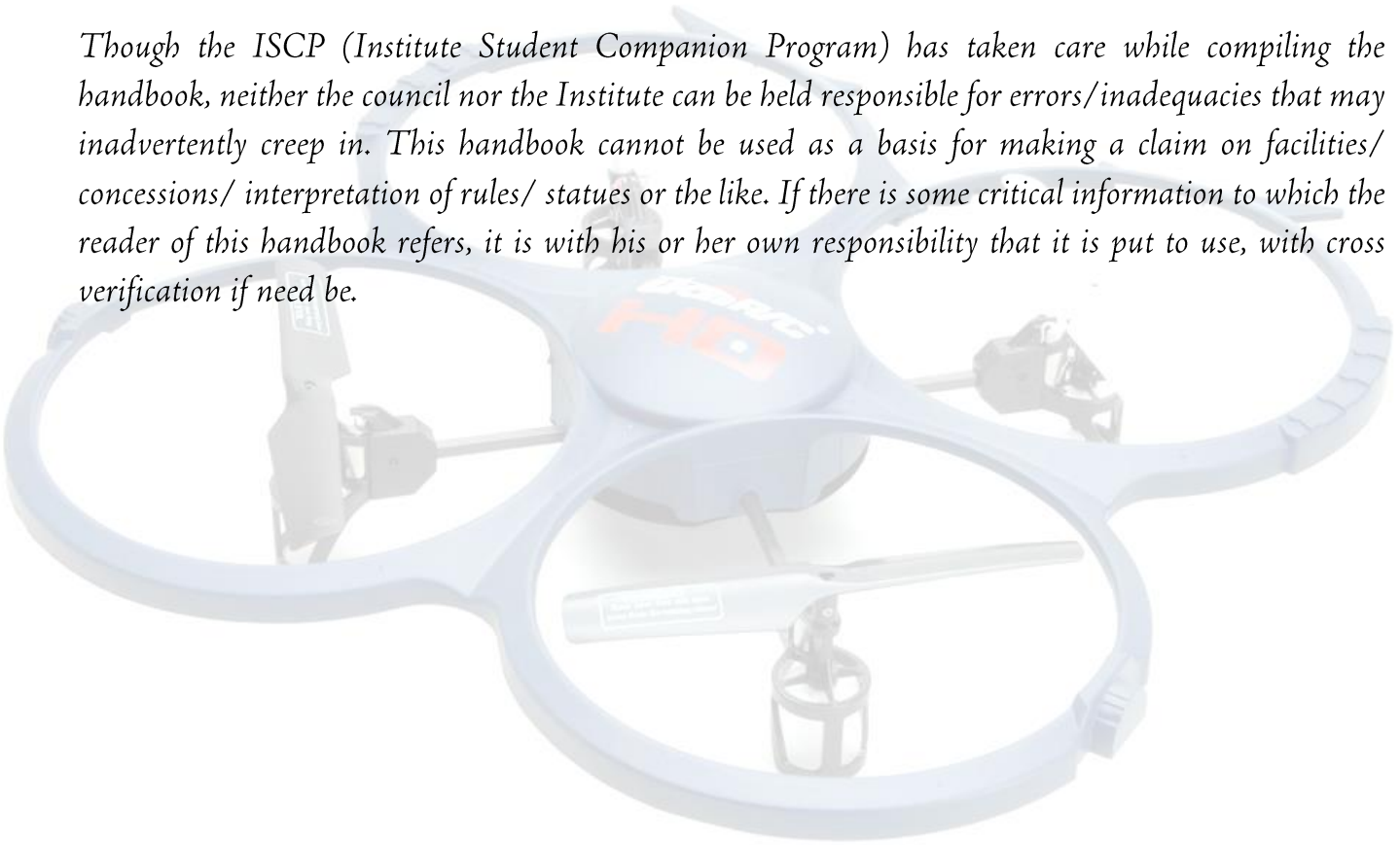
IIT Bombay
Systems and Control

> **Self-control is the Strength Systems and Control is the Mastery**

iSCP

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 the Institute

IIT Bombay was founded in 1958 and in the year 1961 became the Institute of National Importance. It is located at Powai, in East Mumbai, between the Vihar and Powai lakes with a lush green campus spanning over 550 acres. In 2018, IIT Bombay was one of the first six institutes to be awarded the Institute of Eminence status. IIT BOMBAY as an institute offers an all-round development opportunity to its students in the form of rich academic programmes and rich non-academic culture.

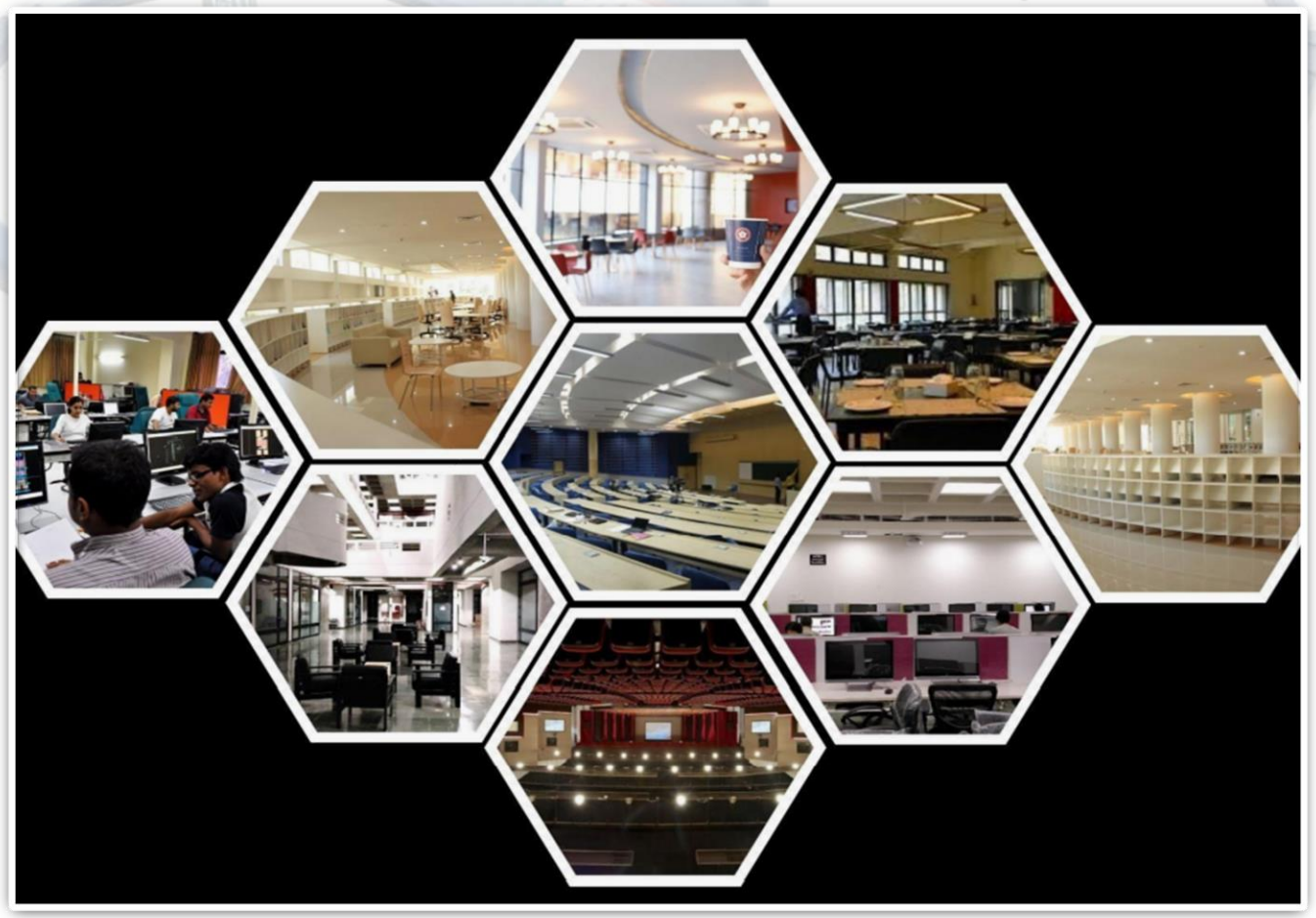
The institute is a budding ground for many talents that are nurtured by different clubs and societies functioning at IITB. IIT BOMBAY have been serving the nation and society by producing some of the brilliant minds over the past many years and continues to do so.

The list of feats achieved by IITB is long, some recent additions to that list are (1) IIT Bombay has secured third position in 'Overall' and 'Engineering', and tenth in the Management category. It stood 3rd in the new 'Research' category of the National Institutional Ranking Framework (NIRF). (2) IIT Bombay has secured the second position in India and 172nd rank this year in the Quacquarelli Symonds (QS) World University Rankings (2022), (3) Became the pioneer in developing and adopting a new academic structure in these challenging times.

About the Campus

IIT Bombay is a small township in itself. Rich in natural flora and fauna to begin with, the campus' green cover has been maintained and even increased over the years. An island of green in the otherwise concrete jungle that is Mumbai, the campus at Powai nestles among hills and is flanked by the Powai and Vihar lakes. It is special both in terms of its physical beauty and location — a place where you can be away from the busy world, yet still be a part of it. Education and research are the twin pillars of this institute and the ambience is one in which new ideas and creativity can flourish.

The campus is connected to the city proper — an hour's distance — by buses and local trains. However, most facilities are available on campus itself, including banks, a shopping centre, two excellent schools for children, and a well-equipped hospital. All students and most faculty live on campus, in student hostels and IIT staff quarters. The peaceful atmosphere of the campus belies the wide range of activities that complement academic life.



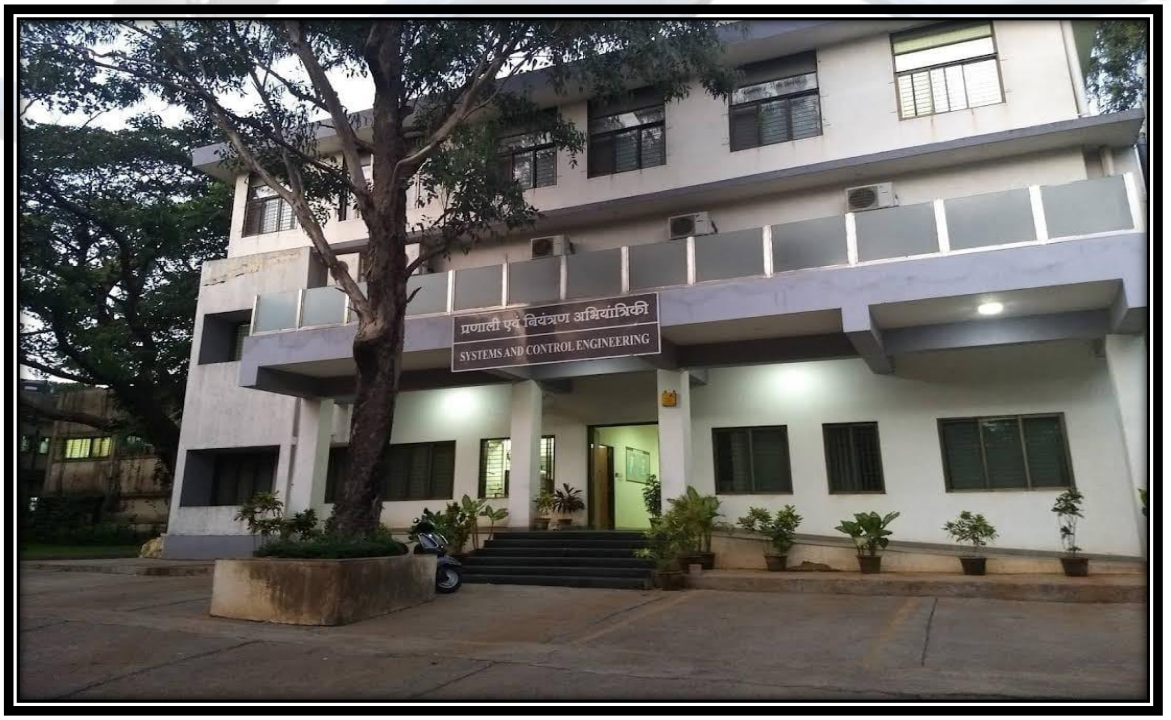
Library, Auditorium, Classroom, Computer Centre, Cafeteria

ABOUT THE DEPARTMENT

The Systems and Control group formed in 1977, is a unique interdisciplinary program in the country that offers post-graduate education (M. Tech./Ph. D.) in the broad area of Systems and Control. The group has 10 core faculty members and about 11 associated faculty members from other academic units of the institute. The average doctoral strength is around 20 and M. Tech. intake every year may vary but it would be roughly around 18.

The research focus of the core group is in the areas of nonlinear control, robotics, path-planning, automation and feedback control, coordination of autonomous vehicles, multi-agent systems, game theory, information theory, combinatorics, sliding mode control and applications, fractional-order modelling and control, optimization and optimization-based control, deep learning, NMR spectroscopy and stochastic processes. Besides, research in the areas of process control, identification, behavioural theory, matrix computation, adaptive control, automotive control is being pursued by the associate faculty members.

Many of the alumni of the group hold senior positions in the control, Analytics, automation industries and research laboratories in and outside the country.



WELCOME NOTE FROM THE CONVENER

Dear Freshers

Welcome to the Systems and Control (SysCon) Group, IIT Bombay. We are a highly specialized group in India offering Ph.D., M.Tech., and Undergraduate Minor Programs in System and Control Engineering. It is an extremely competitive place, and I congratulate you all for being part of this group.

The SysCon group is extremely strong in interdisciplinary and collaborative technical research, and we have state-of-the-art research facilities and coursework of exceptional depth and breadth to support our research and academic programs. Our faculty members are highly regarded in the international community, they have been conferred with many prestigious awards at international and national for a, and their research papers have received coveted and prestigious international awards. Most of our faculty members serve on the Editorial Boards of the top international journals in our field, and we organize international symposia and conferences at IIT Bombay on a regular basis.

For control engineers and scientists, the current era is exciting since our discipline is viewed as a sustaining source of fundamental tools and technologies in almost all spheres of engineering. It is our overarching target to ensure that your technical training with us is holistic, fruitful, and academically productive so that you may meet the challenges and rise to the needs of our society. It is frequently said that the limits of our imagination determine the limits of our world; against this backdrop, it is our long-term target to enable you to widen your imagination so that you may transcend your dreams and reach for the stars.

Warm Regards

Prof. Debasish Chatterjee
Convener, SysCon
IIT Bombay
https://www.sc.iitb.ac.in/~chatterjee

WELCOME NOTE FROM DEPARTMENT COORDINATOR

Dear New Entrants,
Congratulations on making it to IIT BOMBAY.

We at ISCP are always engaged in a quest to serve the freshers coming to IIT. As the department coordinator, I will be responsible for extending those benefits to you and to take up your issues for timely mitigation. As the upcoming session will most probably be conducted in offline mode and you all will be able to enjoy the campus, many of you must be wondering how you will cope with it all be it academics or getting along with IIT culture. Worry not we got your back. I can bet on the fact, that your tenure at IIT will be worth remembering for a lifetime. Difficult situations are testimony of one's character, you all did the hard work to get here and from now onwards we will work together to steer you through the all the difficulties.

It's a suggestion to all, please go through this handbook content and follow the guide book that is provided with it. If there is anything that you couldn't get over with, feel free to contact me.
We are always there to help you.
All the Best for all your future endeavour.

Regards

Akash Deep Arya
Department Coordinator
Institute Student Companion Programme (2022-23)
Contac: 9456658892
Email: akashdeeparya01@gmail.com

WELCOME NOTE FROM ISCP TEAM

Heartfelt congratulations for embarking on one of life's most memorable journeys—the journey of learning. The prestigious institute of IIT Bombay welcomes you aboard. Your dedication, hard work, and perseverance brought you here, and we are confident that your experience will lead you towards great opportunities. Owing to the ongoing covid-19 pandemic, the onboarding will be offline. However, rest assured that we are there to assist you in any way possible, from smooth orientation to coping with academic pressure.

Institute Student Companion Programme (ISCP) is a student body with the primary objective of building a relationship of trust and comfort between the on-roll students and the incoming students of the PG programs. We are here to help you get familiar with the ways of IITB, which is even more critical in these times. You will become part of a culture where people want to perfect their craft and thus work day in and out. The scope of these is not limited just to academics. Various online events will be organized by the cultural, technical, and sports clubs in IITB, like code in quarantine, fitness challenges, dance challenges, and many more. Managing these along with online lectures might seem daunting at first, and hence, to help you with a world of problems, including these, we assign you a student companion, who are self-motivated volunteers who will genuinely help you in low and high tides as an act of giving back what they received from the programme. You can look up to the team for any form of support, any information before venturing out into an unknown domain, be it academics or extracurricular activities. You can reach out to us for any issue regarding the curriculum, facilities provided, your physical, social or mental health, and last but certainly not the least, reach out to have a chat with us because that is what we are for, for you.

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

We welcome you to IIT Bombay— A journey where you Learn, Grow and Enjoy.
The campus of IIT Bombay awaits your presence; we will soon see you there.

Overall Coordinators,
Institute Student Companion Programme (2022-23)
IIT Bombay
Email : iscp@iitb.ac.in

Overall Coordinators ISCP (2022-23)

Prabhat Sharma
Contac: +91 98999 46039
Email: 215120018@iitb.ac.in

Abhishek Raman
Contac: +91 8789676472
Email: 213040033@iitb.ac.in

Dipankar Kuli
Contac: 8638272899
Email: 215060006@iitb.ac.in

WELCOME NOTE FROM IMR, 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 the best exposure to its students in all aspects, both academically as well as non-academically. The skills you develop here, and the interactions you have with people here will stay with you throughout your life.

The post-graduation demands something additional compared to the 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 its 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
Institute Secretary, Academic Affairs (Masters)
Email: imr@iitb.ac.in
Contact no. : 8006080474

DEPARTMENT REPRESENTATIVES

Muthyala Anjali
(Department General Secretary)
Contac: +91 99401 14245
Email: 213230009@iitb.ac.in

Rohan Appaso More
(Academic Unit Representative for Academic affairs)
Contac: +91 87882 68582
Email: 213230013@iitb.ac.in

Sayan Ray
(Company Coordinator)
Contac: +91 90077 04582
Email: 213230011@iitb.ac.in

Mirza Aman Baig
(Department Placement Coordinator)
Contac: +91 85169 41990
Email: 213230007@iitb.ac.in

Department Core Faculty and their Research Interests

Prof. P. S. V. Nataraj

Deep Learning, Modeling, Simulation, and Control of Gas turbines, Modeling, Simulation and Control of Boilers, Nonlinear System Analysis and Control, Reliable Computing using interval analysis techniques, Robust Stability and Control especially using quantitative feedback theory (QFT) techniques, SCADA and PLCs

Email: nataraj@iitb.ac.in

Prof. Ravi N. Banavar

Optimal control, Geometric mechanics and nonlinear contol Lagrangian and Hamiltonian mechanics. Application areas - Mechanical (robotics), aerospace (launch vehicles, spacecrafts) and electrical power system networks.

Email: banavar@sc.iitb.ac.in

Prof. Navin Khaneja

Control theory, NMR spectroscopy, Nonlinear and geometric control, Quantum information and control

Email: nkhaneja@sc.iitb.ac.in

Prof. Arpita Sinha

Cooperative control of Multi-agent systems, Resource Allocation, Team theory and its application, Game theory

Email: Arpita.sinha@iitb.ac.in

Prof. Leena Vachhani

Embedded control systems, Vision based autonomous motion planning, Multi agent map building, Open source hardware/software for robotic applications, Autonomous underwater robotic applications

Email: leena.vachhani@iitb.ac.in

Prof. Debasish Chatterjee (Convener)

Constrained and optimization based control, in particular, stochastic model-predictive/receding-horizon control, switched and hybrid systems, control under communication and computation constraints, stochastic control, applications of stochastic process in engineering systems.

Email: dchatter@iitb.ac.in

Prof. Sukumar Srikant

Nonlinear and adaptive control, non-autonomous controller and state observer design, decentralized control, cooperative and network control, hybrid systems, mathematical control theory. Application areas: Spacecraft attitude control, bio-mechanical systems, dynamics and control, power systems, autonomous vehicles and robotics, formation flying and consensus theory

Email: srikant.sukumar@iitb.ac.in

Prof. Ankur A. Kulkarni

Game theory, stochastic control, optimization, economics, information theory, combinatorics and systems biology.

Email: Kulkarni.ankur@iitb.ac.in

Prof. Vivek Natarajan

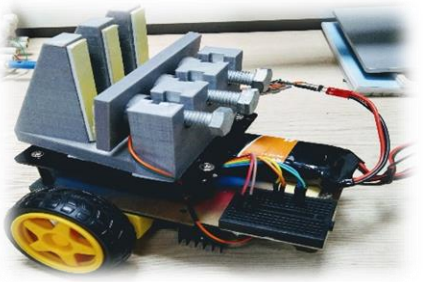
Distributed parameter systems, output regulation, adaptive control, power system stability, nonlinear Schrödinger equation, multiagent networks, repetitive control, periodic systems, vibration control.

Email: vivek.natarajan@iitb.ac.in

LAB FACILITIES

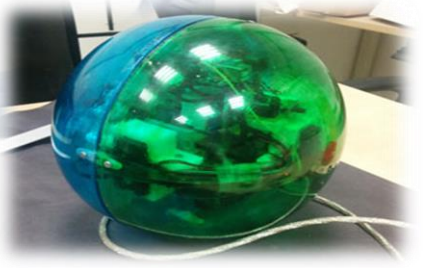
A.R.M.S LAB

The Autonomous Robots and Multi-robot Systems Lab is part of the Systems and Control Engineering Department at IIT Bombay. The lab is primarily involved in robotics research. Our projects are spread across a wide range of fields including robot vision, multi-robot systems and path planning.



Embedded Control Lab

This lab allows students to practice implementing embedded systems with standard communication protocols and specifications. Students may work on experiments and projects dealing with standard peripherals, microcontrollers, single-purpose and general-purpose processors component interfacing, and communication protocols in embedded system design.



Experiment Lab A

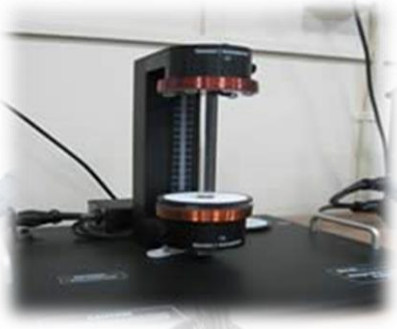
The experimental lab at Systems and Control is geared towards introducing students to hardware and software that implement control theories learnt as part of coursework. A variety of setups based on mechanical, electrical and chemical principles are made available to the students for this purpose. This lab houses hybrid tank, pneumatic actuator, 2 dof, quadcopter, 3D crane, plant Emulator, gyroscope, the inverted pendulum for experiments and projects.

Experiment Lab B

This lab is primarily dedicated to robotics. The lab houses setups of different kind of mobile and aerial robots. As part of core coursework all masters students are expected to understand modelling, communication, sensor calibration and control of hardware to accomplish different control objectives. In addition, several graduate students carry out a part of their research on these setups to validate control designs.

Computational Lab

SysCon project staff work here. Projects from MHRD (magnetic levitation and dc motor analysis), DRDO (gas turbine engine), CUDA,MDWS (water meter) are currently being work done.



Department library

The SysCon dept. the library is next to the office room. Entry to the library is biometric. It contains course books and M.Tech/PhD thesis of the previous year's students. A TA will be allotted in charge of the library. For issuing/returning of or browsing through the books, one is expected to contact the TA in charge.

SysCon Office

The SysCon Office is the place where all the official work of the department is carried out. It remains opens during the official timing. Contact the office for any query regarding the registration, document, fee payment, course work, stipend.

SysCon Webmail and Server

Upon filing the appropriate forms at the office, an email account and some space is allocated to you on the syscon server. The email ID and password will be separate from the IITB email id and will be from the domain sc.iitb.ac.in

Note: All the labs and library rooms are biometric access controlled. Separate permission has to be taken from the department office to enable access to each room.

M.Tech Projects Lists

❖ 2020-22 Batch

Name	Project Title	Guide
Malaya Shreni	Deep Reinforcement Learning based control schemes: Study and Applications	Prof. P S V Natraj
Vinayak Jauhari	Image Captioning using Deep Learning	Prof. Debasish Chatterjee Prof. Biplaq Banerjee
Aditya Arvind	Predictive Modelling and Maintenance for Distribution Networks	Prof. P S V Natraj
Supratim Dey	Trajectory control of a nonholonomic differential drive robot	Prof. Sukumar Srikant
Debashis Tarai	Modeling and control of industrial heater plate system	Prof. Vivek Natrajan
Aakanksha Dhidhi	Visual question answering Using deep learning	Prof. Biplaq Banerjee
Amey Waghmare khemlal Sahu	Control of Twin Rotor MIMO system using Raspberry Pi	Prof. Sukumar Srikant
Sushant Suryawanshi	Autonomous Driving at an unsignalized Intersection: A decision-making scheme	Prof. Arpita Sinha
Anshuman Sharma	Predictive Maintenance for Engineering Systems: Study and Applications	Prof. P S V Natraj
Guntaka Harsha Priyanka	Acoustic Localization using Smartphone	Prof. Leena Vachhani

❖ 2019-21 Batch

Name	Project Title	Guide
Komal Agnihotri	Agent-Based Modelling.	Prof. Ankur A. Kulkarni
S Bhargav Pawan Kumar	State Estimation and Observer Design on partial differential equations.	Prof. Vivek Natarajan
Ekansh Saraf	Data Analytics for Banking Problems.	Prof. Ankur A. Kulkarni
Ravindra Kumar Panda	ML methods for Depth Estimation for robotic application.	Prof. Leena Vachhani
M Y V Krishna Teja	Development of Embedded Adaptive predictive controller using Raspberry Pi.	Prof. P S V Natraj Prof. Sachin C Patwardan
Akamal Khan	Trajectory Planning for Autonomous Vehicles.	Prof. Arpita Sinha
Himadri Haldar	Adversarial Attacks and Defences in Deep Learning.	Prof. P S V Natraj Prof. Biplab Banarjee
Shubham Sharad Bhise	Compliant Mechanism inspired Leech Robot – Modelling and Control.	Prof. Bijan Bandyopadhyay Prof. Prasanna Gandhi
Girish Prakash Maske	Ml methods for Identifying Unique Location.	Prof. Leena Vachhani
Neelam Patwardhan	Work State Estimation based on time series data of off-road Vehicle using ML.	Prof. Leena Vachhani
Pooja Satelkar	Fault-Tolerant Control System using Kalman Filter.	Prof. Leena Vachaani
Pooja Satelkar	Fault-Tolerant Control System using Kalman Filter.	Prof. Leena Vachaani

Placement

IIT Bombay has proved to be the most preferred destination for aspiring technologists from across the country. IIT Bombay has produced many illustrious alumni, whose contribution at national and international level has been significant. The alumni of IIT Bombay are often sought after for covered positions in the realm of business, academics and research. IIT Bombay consistently maintains an exemplary recruitment record. Our graduates and Post graduates have been selected by leading national and multinational corporations and research institutes.

We have one department placement coordinators from second year who represent SysCon department in Placement Cell and one Company coordinators from our department in the placement cell.

We have placement in the field of Control Engineer, Renewable, Design Engineer, Data analytics, Consulting, Corporate Model Risk, Data Scientist, ML Researcher, Multimedia, Metrology, Business Analyst and Academics. Many of our students went to prestigious institutes in India for doing Ph.D.

For batch 2020-22

No of students registered	*11*
No of students placed	*11*

For batch 2019-21

No of students registered	*8*
No of students placed	*6*

Recruiters:

Placement Report Of 2020-22

NAME	COMPANY	JOB PROFILE
Malaya Shreni	Mathworks	Control engineer
Vinayak Jauhari	TSMC	Data Engineer
Aditya Arvind	Micron Singapore	Metrology Engineer
Supratim Dey	TVS Motor	Design Engineer
Ekansh Saraf	GE	Corporate
Debashis Tarai	ZF India	ML Engineer
Aakanksha Dhidhi	ZF India	ML Engineer
Amey Waghmarekhemlal Sahu	Mathworks	Control Engineer
Sushant Gokul Suryawanshi	ZF India	ML Engineer
Anshuman Sharma	GE	Renewable Engineer
Guntaka Harsha Priyanka	Qualcomm	Multimedia Engineer

Placement Report 2019-21

NAME	COMPANY	JOB PROFILE
Ponala Vankata Eswar sai	Mercedes	R&D
Saurabh Dhamne	GE	Corporate
Sishir Kumud	Hitachi Limited	
Saiprasad Pampatwar	CapGemini	Associate Consultant
Piyush Tripathy	Ubisoft	Programmer
Neeraj Adwani	GE	Edison Engineer

M.Tech Course work details

As mentioned at the SysCon website, sc.iitb.ac.in → Academics → Curriculum → Mtech Course work

L – Lectures per week | T – Tutorials per week | P – Practical per week | C – Credits

	Course	Course Title	L	T	P	C
First Semester	SC 625	System Theory/Elective	3	0	0	6
	SC 629	Introduction to Probability and Random Processes/Elective	3	0	0	6
	SC 639	Mathematical Structures for Control/Elective	1	2	0	6
	SC 899	Communication Skills	3	0	0	6
		Elective	3	0	0	6
						24+6

	Course	Course Title	L	T	P	C
Second Semester	SC 602	Control of Nonlinear Dynamical Systems / Elective	3	0	0	6
	SC 607	Optimization / Elective	3	0	0	6
	SC 626	Systems and Control Engineering Lab	1	2	0	4
	SC 645	Intelligent and Feedback Control / Elective	3	0	0	6
	SC 694	Seminar	3	0	0	4
		Elective/Institute Elective				6
		Elective				6
						38

	Course	Course Title	L	T	P	C
3rd Sem		Elective				6
	SC 697	I Stage Project				54
						60

	Course	Course Title	L	T	P	C
4th Sem	SC 698	II Stage Project				36
		Total Credits				158+6

Important Websites:

Application Software Centre (ASC) – Administration

http://asc.iitb.ac.in/

This website is the main interactive website for a student for all of his/ her's administrative requirements. From paying your fees to checking your grades, all can be done on this website. The website also has links to all other websites of the institute. Some of the most important facilities offered by this website are given under:

- *Payment of fees*
- *Registration and de-registration from courses*
- *Checking previous years' grades awarded in anysubject*
- *Brief contents of any subject being offered*
- *Own personalised timetable*
- *Checking of own academic performance (grades)*

Moodle – Academics

http://moodle.iitb.ac.in/

This website provides academic interaction between students and faculty for all courses enrolled by a student. You can download study material/ books/ notes uploaded by a professor/ TA and also submit projects etc here. The website also offers a platform where you can interact with the Professor/ TAs/ other students on any subject related matter.

Webmail

https://webmail.iitb.ac.in/

This is your personalised e-mail in IIT. Every student gets one when you enrol. Along with normal mail, here you also get alerts for registration/ de-registration of courses, fees payment and any broadcast on moodle among others. You may create an alias for your LDAP ID once. Your LDAP ID is your roll no.

Central Library

https://www.library.iitb.ac.in/

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

Systems and Control

https://www.sc.iitb.ac.in/index.html

Our department's website, it has the contact details of all faculty members, staff and students of our department. It also displays the academic research areas of the SysCon department and has a link for the intra department e-mail.

Important Tips:

	IMPORTANT TIPS
1.	*Always carry your ID-card*
2.	*Download the **M-indicator App** on your phone to find your way around Mumbai. It provides timings of local trains and buses, along with auto and taxi fares.* *https://play.google.com/store/apps/details?id=com.mobond.mindicator&hl=en_IN&gl=US*
3.	*The nearest station to the IITB campus is Kanjurmarg and it is located on the central line of the local train network.*
4.	*MYBYK App: https://play.google.com/store/apps/details?id=in.greenpedia.mybyk Rental cycle app used to commute easily in the campus.*
5.	*Download the InstiMap app on your phone to find your way around campus* *https://insti.app/map*
6.	*Info about events, placement blog, map of the institute and mess menu are uploaded in it* *https://play.google.com/store/apps/details?id=app.insti&hl=en_IN*
7.	*Join facebook groups like Freshmen Group, IITB Food Recommendations [while you get adjusted to mess food], Buy and Sell IITB [for all purchases/sales inside IITB], Hostel Groups*
8.	*You can join the Google groups of various institute clubs such as literary arts, speaking arts, Photography etc. As per your interests.*
9.	*Download Google Pay, Phonepe and Paytm and go cashless in the institute and you will get a discount too*

STUDENT WELLNESS CENTRE

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.

At STUDENT WELLNESS CENTRE (SWC), there are professional and experienced Counsellors, who encourage you to approach them for any problem that you are facing- be it academic, emotional, social or financial- without hesitation.

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

If someone approaches SWC for counselling regarding any problem, it is ensured that the information regarding the request and counselling session remains confidential.

Typical concerns of students who seek counselling are :

- *Transition and change*
- *Uncertainty about values and goals*
- *Academic pressure*
- *Dealing with new academic patterns*
- *Personal relationships with the special one and with friends*
- *Family concerns*
- *Issues of grief and loss*
- *Stress, depression and anxiety*
- *Lack of motivation; concentration difficulties*
- *Others…*

To know more about student wellness centre, feel free to contact the department coordinator or the student companion or visit SWC IITB website. http://www.iitb.ac.in/swc/en/about-student-wellness-centre

GENDER CELL

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

The IIT Bombay Gender Cell (GC) inquires 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.

Gender cell conducts many activities and training sessions with the above-mentioned goal at its heart. Its have its office in the main building on the 3rd floor, next to the student wellness centre.

For further details related to gender cell(GC), feel free to contact your mentor or department coordinator or you can also visit the GENDER CELL website.

https://www.gendercell.iitb.ac.in/en


प्रणाली एवं नियंत्रण अभियांत्रिकी
SYSTEMS AND CONTROL ENGINEERING

Systems and Control Engineering

Indian Institute of Technology Bombay

Welcome to the SysCon family

Systems and Control Engineering

Near Central Library
Indian Institute of Technology,
Bombay Powai, Mumbai - 400 076
Maharashtra, INDIA

email: syscon_office@sc.iitb.ac.in

Phone: +91 22 2576 7884

SysCon iitb Systems & Control