

## INFORMATION BROCHURE

Congratulations on doing extremely well in GATE and securing admission to the Department of Computer Science and Automation. Welcome to CSA!

### ***Faculty Advisor***

While we are sure that all of you have the inherent motivation and abilities to get through the programme with flying colours, we believe a little extra guidance from us will go a long way in smoothing out your adjustment to a new academic environment and in enhancing your academic performance. Your primary source of academic guidance and counseling is the faculty advisor assigned to you. During the beginning of your course, you should make it a point to get to know your advisor well, and meet your advisor frequently in the early part of your stay here, and especially whenever you face any problems. The distinction between students and faculty is more blurred: you will find faculty willing to deal with you on a more equal level, to listen to and value ideas from you that might be contradictory to their current knowledge and viewpoints.

### ***Student Advisor***

There will also be a student advisor assigned to each student. They are someone with whom you can interact closely in a friendly and informal way to help yourself acclimatize to the environment here. Apart from the faculty advisor, the student advisor is another avenue for helping you in adjusting with the environment in the CSA department and the IISc campus in general.

Do not hesitate to approach senior students and faculty members for help.

### ***Graduate vs. Undergraduate Study***

A graduate student is assumed to be fairly mature academically and self-motivated to a large extent. Unlike undergraduate studies, your emphasis here should be on obtaining deeper understanding of challenging and interesting subjects and less on obtaining high grades. The de-emphasizing of grades is more important since most of you have been top rankers at your respective colleges. Naturally not all of you can become top rankers here, nor is it necessary as long as you gain a sound understanding and mastery of the subjects. Graduate studies have other equally important or superior metrics for measuring performance: how well you do in courses from a focused area of your interest and choice; how well you do in your dissertation work; may be even how well you do in academic work that you undertake beyond the classroom and project. This doesn't mean you do not strive to get the best grades. Getting superior grades is important but is only one of many aspects of the learning process here.

### ***Exploring Cutting-Edge Research***

Considering that you are among the top students of the country, it is likely that you harbour ambitions of doing cutting-edge research in industry or pursuing an academic career. A Ph.D. is a prerequisite for such a research career. With regard to job prospects, the Indian job market now has very challenging jobs to offer for researchers. The rigours and challenges of our doctoral programme have enabled several of our Ph.D. graduates to occupy key, senior positions in corporate R&D institutions as well as in academia.

Suppose you are convinced enough to start thinking in terms of a Ph.D. The next question is: why do so at IISc? Here are a few good reasons: intellectual ambience of IISc coupled with excellent faculty at CSA. You have an opportunity here to do a world-class Ph.D. without losing out on the benefits of living in the environment and culture that you are probably most comfortable with.

## **Information for M.Tech. (CSE) students joining CSA in year 2016**

The M.Tech. (two years) Programme in Computer Science and Engineering (CSE) is a challenging one with courses that have high standards, interesting and stimulating content. Needless to say, you will have to work hard. Please go through this brochure carefully, and keep it as a handy reference for the future. A copy of this document is also available on the CSA web page <http://www.csa.iisc.ac.in/>.

### ***First Term***

1. Selection of courses: Meet with your faculty advisor and select exactly four courses, ensuring that one course is taken from each of Pools A, B and C.
2. Work hard to complete your courses with good grades. Note that if your CGPA is high, you can take an additional course in the next semester.

### ***Second Term***

1. Selection of courses: Meet with your faculty advisor and select up to four courses (you may take an additional course if you secure the required CGPA).
2. Selection of Research project and guide: Take help from Departmental Curriculum Committee (DCC), faculty and senior Research students in the department in this regard. By the end of the second term, you will have to select your project and guide in consultation with the DCC.

### ***Third Term***

1. Selection of courses: Meet with your faculty advisor and select the remaining courses, ensuring that you finish both your course and pool requirements (you may take an additional course if you secure the required CGPA). You must have taken two courses each from Pools A, B and C at this point.
2. Placements are usually held during this term.
3. Start working on your research project.

### ***Fourth Term***

1. Complete the remaining work to conclude your research.
2. Start writing your M.Tech. project report.
3. Writing of research papers, technical reports, etc.
4. Prepare for your future endeavors.

## **Doing Research as a Part of Dissertation Work**

The next important issue is the idea of pursuing research. As a part of M.Tech. programme, you are required to write a dissertation. Over the years, the nature of this dissertation work has become more research-oriented, and you are expected to publish papers in international conferences and journals from your dissertation work. Gradually, facilities have been enhanced to do this kind of dissertation work. In the good old days, papers need to be photocopied and read, but now everything is available at your fingertips on the internet (you still need to read them). At the same time, terabytes of storage space is also available. The only additional input you require from your end is your determination to carry out an excellent dissertation work.

## **Further opportunities for research at IISc**

You can convert from M. Tech. to the Ph.D. program at the end of first, second or third term. The requirement is a high CGPA.

## **Information for M.Tech. (Research) students joining CSA in year 2016**

The M.Tech. (Research) research program is a 1 to 2.5 year program. The students are expected to be self-motivated and should be able to work well in teams as well as individually. It is to be noted that, as in case of M. Tech. program, you can also convert to Ph.D. programme during the course of M.Tech. (Research). However, you can also change over to Ph.D. programme at the time of submitting your M.Tech. (Research) thesis.

### ***First Term***

1. Getting acquainted with the people, facilities in CSA specifically and IISc in general.
2. Selection of courses (depending on your intended area of research): The selection includes at least one mathematics or mathematically-oriented course. Most students take 4 courses to complete the Research Training Programme (minimum required is at least 12 credits) in the first semester. However, you can choose to take less based on the availability of required courses.
3. Selection of Research area and guide: Take help from Departmental Curriculum Committee (DCC), faculty and senior Research students in the department in this regard. There will also be a DCC meeting shortly after joining.

### ***Second Term***

1. Take any advanced course useful for your Research if required or suggested.
2. Select the problem and take seek the assistance of students working in the same area.
3. Start literature survey.

### ***Third Term***

1. Deliver a 'Perspective Seminar', a comprehensive survey of your area of work from the standpoint of the specific problem under investigation.
2. Start experimentation and collection of results
3. Writing of research papers, technical reports, etc.
4. You may continue on to the PhD program immediately after submitting your dissertation. (Alternatively, you may apply for a PhD later and appear in a research interview after graduating and leaving IISc.)

### ***Fourth Term***

1. Complete the remaining work to conclude your research.
2. Start writing your thesis.
3. Colloquium and thesis defense.
4. Prepare for your future endeavors.

## **Information for Ph.D. students joining CSA in year 2016**

The duration of the Ph.D. program is usually 4-5 years. The students are expected to be self-motivated and should be able to work well in teams as well as individually.

### ***First term***

1. Getting acquainted with the people, facilities in CSA specifically and IISc in general.
2. Selection of courses: The courses you select depend on your intended area of research. It is compulsory that you should select at least one mathematics or mathematically-oriented course. A Direct Ph.D. student after finishing their B.E./B.Tech. should gain at least 24 credits (which may mean usually 6-8 courses) to complete their Research Training Programme (RTP) whereas a Ph.D. student who already has a Masters degree needs to gain only 12 credits (i.e. 3-4 courses). Students are usually advised to take a maximum of 4 courses in the first semester.
3. Selection of research area and guide: Take help from Departmental Curriculum Committee (DCC), faculty and senior research students in the department in this regard. A special DCC meeting will be arranged for this purpose shortly after the semester starts.
4. Work hard to complete your RTP with good grades. Award of fellowships for PhD also depend on your CGPA that you obtain in the first semester besides progress in research work. These fellowships are normally awarded in the beginning of every calendar year.

### ***Second Term***

1. If you haven't yet finished the required number of courses in the first semester itself, select the remaining number of courses to complete the requirements of RTP. Take any advanced course useful for your research if required or suggested.
2. Select the problem and take seek the assistance of students working in the same area.
3. Start literature survey.

### ***Third Term***

1. Deliver a 'Perspective Seminar', a comprehensive survey of your area of work from the standpoint of the specific problem under investigation.
2. Start concrete work on solving your research problem.
3. A Ph.D. student has to pass the comprehensive examination. You may appear for the comprehensive examination either in the third semester or in the fourth semester (before the end of two years), depending on the progress in your research work and in consultation with your advisor. In the comprehensive examination, the candidate is first expected to give a brief presentation of his/her research work. This is followed by questions on the syllabus for the RTP undergone by the student.
4. Writing of research paper/technical reports, etc.

### ***Fourth Term***

1. Complete the comprehensive examination if you haven't already completed it.
2. Continue with your research work.
3. Write more research papers.

### ***Fifth and Subsequent Terms***

1. Complete the remaining work to conclude your research.
2. Once you have enough results, start writing your thesis. (You may want to consult your advisor regarding when to start writing your thesis.)
3. Colloquium, Thesis defense, etc.

## **General Information about Courses**

### ***Course Structure***

IISc follows a credit structure. Each subject has a specified number of credits. Each credit stands for one lecture hour per week or 3 hours of practicals. The credit for the course is of the form  $x:y$ , where  $x$  is the credits for lecture hours and  $y$  is the credits for practicals. In some cases, where there is limited scope for practicals,  $y$  refers to the credits for solving problems through tutorial sessions or homework. The total credits for the course is  $x+y$ .

In practice, you will often have to spend more than 3 hours per week for the 1 credit of practical. Unlike most undergraduate programs, practicals and homeworks don't have any fixed timings. You have to spend as much time as you require and complete them. You will find numbers associated with each of the subjects. For example,

E0 220 Graph Theory	3:1
E0 227 Program Analysis and Verification	3:1
E1 254 Game Theory	3:1

Here, E in E0 stands for the fact that the course is offered by in the Division of Electrical Sciences. 0 stands for Computer Science discipline, 1 stands for Intelligent Systems and Automation discipline, etc. The number 228 is course number, where the first 2 stands for 200 level. A 200 level course is at Master level. A 300 Level course is at Research level.

### ***Choosing Courses***

Each of you has come in with some idea of the areas of Computer Science that are of interest to you. But the faculty here often finds that your interests are based on misconceptions about the areas! Computer Science is taught in quite a different manner here at IISc, with much more rigour, orientation towards practical aspects, and emphasis on cutting-edge topics. This is very likely to change both your impressions about different sub-areas of computer science and your interests. Therefore, it is very important for you to put aside your prior notions to a good extent, and try out a variety of courses here.

Another common phenomenon is the rush towards courses that currently have high job market value. While it is natural for students to lean towards such courses, it is equally important to not lose yourself to herd mentality or short-term prospects. So how does all this affect your M.Tech. or Research Programme here? Given the fast moving Indian industry, it is very important for you to view your stay at IISc as a long-term investment rather than a short-term one, where you focus yourself on one sub-area of today to get a job tomorrow. It is important to broad-base your choice of elective courses. Your objective should be to gain a sound understanding and superior skills in core topics with a long-term perspective. This is where continuous interaction with faculty advisors assumes much significance.

### ***List of Courses Offered***

A listing of courses offered by the Department faculty is provided on the following pages.

It gives you the general idea of the courses you can expect this year, but new courses may be added so keep an eye out for changes in the course listing on the CSA homepage.

**List of courses offered during August-December 2016**

<b>Course #</b>	<b>Course Name</b>	<b>Credits</b>	<b>Pool</b>	<b>Instructors</b>
E0 210	Principles of Programming	3:1	B	Murali Krishna Ramanathan K Gopinath
E0 219	Linear Algebra and Applications	3:1	C	Dilip Patil
E0 220	Graph Theory	3:1	A	Sunil Chandran
E0 222	Automata Theory and Computability	3:1	A	Deepak D'Souza
E0 224	Computational Complexity Theory	3:1	A	Chandan Saha
E0 225	Design and Analysis of Algorithms	3:1	A	Arnab Bhattacharyya Siddharth Barman
E0 230	Computational Methods of Optimization	3:1	C	Chiranjib Bhattacharyya
E0 232	Probability and Statistics	3:1	C	Ambedkar Dukkipati
E0 243	Computer Architecture	3:1	B	Matthew Jacob
E0 248	Theoretical Foundations of Cryptography	3:1	A	Bhavana Kanukurthi
E0 251	Data Structures and Algorithms	3:1		V. Susheela Devi
E0 252	Programming Languages : Design and Implementation	3:1	B	Y.N. Srikant
E0 254	Network and Distributed Systems Security	3:1	B	R.C. Hansdah
E0 259	Data Analytics	3:1		Ramesh Hariharan Rajesh Sunderasan
E0 271	Computer Graphics	3:1	B	Vijay Natarajan
E0 302	Machine Learning for Software Engineering	3:1		Aditya Kanade Shirish K Shevade
E0 331	Optimization for Machine Learning	3:1		Shirish K. Shevade S. Sundararajan
E0 335	Topics in Cryptology	3:1		Sanjit Chatterjee
E0 358	Advanced Techniques in Programming and Compilation for Parallel Architectures	3:1		Uday Kumar Reddy B
E0 374	Topics in Combinatorial Geometry	3:1		Sathish Govindarajan
E1 313	Topics in Pattern Recognition	3:1		M. Narasimha Murty
E1 396	Topics in Stochastic Approximation Algorithms	3:0		Shalabh Bhatnagar

<b>List of courses offered during January-April 2017</b>				
<b>Course #</b>	<b>Course Name</b>	<b>Credits</b>	<b>Pool</b>	<b>Instructors</b>
E0 235	Cryptography	3:1	A	Arpita Patra Sanjit Chatterjee
E0 236	Information Retrieval	3:1	C	M. Narasimha Murty
E0 238	Artificial Intelligence	3:1	C	Susheela Devi
E0 239	Software Reliability Techniques	3:1	B	Aditya Kanade
E0 244	Computational Geometry and Topology	3:1	A	Vijay Natarajan Sathish Govindarajan
E0 249	Approximation Algorithms	3:1	A	Arnab Bhattacharyya Deeparnab Chakrabarty
E0 253	Operating Systems	3:1	B	R.C. Hansdah
E0 255	Compiler Design	3:1	B	Uday Kumar Reddy B
E0 261	Database Management Systems	3:1	B	Jayant R. Haritsa
E0 264	Distributed Computing Systems	3:1	B	R.C. Hansdah
E0 268	Practical Data Science	3:1	C	Shirish K Shevade
E0 270	Machine Learning	3:1	C	Chiranjib Bhattacharyya Ambedkar Dukkupati
E0 301	Virtual Reality and its Applications	3:1		Swami Manohar Vijay Natarajan
E0 310	Advanced Software Engineering	3:1		Murali Krishna Ramanathan
E0 320	Topics in Graph Theory	3:1		Sunil Chandran
E0 322	Topics in Algebra and Computation	3:1		Chandan Saha
E0 336	Randomness in Cryptography	3:1		Bhavana Kanukurthi
E0 343	Topics in Computer Architecture	3:1		Matthew Jacob R. Govindarajan
E1 254	Game Theory	3:1	C	Y. Narahari Siddharth Barman
E1 277	Reinforcement Learning	3:1	C	Shalabh Bhatnagar

In addition to these, some courses offered by other departments in IISc could also be of interest. For course contents of these and other possible courses, look at CSA's homepage.

**M. Tech. Program Course Requirements**

In order to complete the M. Tech. program, students must earn a total of 64 credits.

**Department Core (24 Credits)**

A minimum of 24 credits comprising at least 8 credits each from Pool A, Pool B and Pool C as given below.

<b>Pool A: Theoretical Computer Science</b>		
<b>Course #</b>	<b>Credits</b>	<b>Course Name</b>
E0 220	3:1	Graph Theory
E0 221	3:1	Discrete Structures
E0 222	3:1	Automata Theory and Computability
E0 224	3:1	Computational Complexity Theory
E0 225	3:1	Design and Analysis of Algorithms
E0 228	3:1	Combinatorics
E0 229	3:1	Foundations of Data Science
E0 234	3:1	Introduction to Randomized Algorithms
E0 235	3:1	Cryptography
E0 244	3:1	Computational Geometry and Topology
E0 248	3:1	Theoretical Foundations of Cryptography
E0 249	3:1	Approximation Algorithms

<b>Pool B: Computer Systems</b>		
<b>Course #</b>	<b>Credits</b>	<b>Course Name</b>
E0 210	3:1	Principles of Programming
E0 227	3:1	Program Analysis and Verification
E0 239	3:1	Software Reliability Techniques
E0 243	3:1	Computer Architecture
E0 252	3:1	Programming Languages: Design and Implementation
E0 253	3:1	Operating Systems
E0 254	3:1	Network and Distributed Systems Security

E0 255	3:1	Compiler Design
E0 261	3:1	Database Management Systems
E0 264	3:1	Distributed Computing Systems
E0 271	3:1	Computer Graphics
E0 272	3:1	Formal Methods in Software Engineering

<b>Pool C: Intelligent Systems and Automation</b>		
<b>Course #</b>	<b>Credits</b>	<b>Course Name</b>
E0 219	3:1	Linear Algebra and Applications
E0 230	3:1	Computational Methods of Optimization
E0 232	3:1	Probability and Statistics
E0 236	3:1	Information Retrieval
E0 238	3:1	Artificial Intelligence
E0 268	3:1	Practical Data Science
E0 270	3:1	Machine Learning
E1 246	3:1	Natural Language Understanding
E1 254	3:1	Game Theory
E1 257	3:1	Reinforcement Learning

### **Project (24 Credits)**

The M.Tech. Project is graded in two stages, both sharing the same course code (EP 299).

<b>Course #</b>	<b>Credits</b>	<b>Period of evaluation</b>
EP 299	0:08	August-December Term of 2017
EP 299	0:16	January-April Term of 2018

### **Electives (16 Credits)**

The balance of credits to make up the minimum of 64 credits required for completing the M.Tech. Degree Programme (all at level 200 or higher) should be covered with elective courses from within/outside the department. These courses can be taken with the approval of the DCC and Faculty advisor only.

## **General Information about the Department**

### ***Laboratory Facilities***

The Computing Lab is a general computing facility open 24 hours a day, 365 days a year where students work before being assigned to special purpose research labs. The computing lab is entirely managed by the students. There is no limit to the extent to which students can experiment on the machines, provided they don't inconvenience others.

IISc has a general computing facility at SERC (Supercomputer Education and Research Center) housing supercomputers such as the Cray CX40 (also known as SahasraT, the fastest supercomputer in India) and the IBM Blue Gene, and clusters, workstations and many more systems.

### ***Research Laboratories***

Our research laboratories have more than a 100 PCs running Linux. These are special purpose labs for project and research work.

<b>Theoretical Computer Science</b>		
<b>Lab Name</b>	<b>Faculties in Charge</b>	<b>Room No.</b>
Algorithmic Algebra and Symbolic Computation Lab	Ambedkar Dukkipati	CSA 202
Informatics and Security Lab	C.E. Veni Madhavan Sanjit Chatterjee	CSA 253
Algorithms and Complexity Theory Lab I	Arnab Bhattacharyya	CSA 301
Algorithms and Complexity Theory Lab II	Chandan Saha	CSA 302
Theory Lab I	Satish Govindarajan	CSA 305
Theory Lab II	L. Sunil Chandran	CSA 307
Approximation Algorithms Lab	Siddharth Barman	CSA 309
Cryptography, Security and Privacy Group	Bhavana Kanukurthi	CSA 326
Cryptography and Information Security Lab	Arpita Patra	CSA 329

<b>Computer Systems</b>		
<b>Lab Name</b>	<b>Faculties in Charge</b>	<b>Room No.</b>
Multicore Computing Lab	Uday Kumar Reddy B.	CSA 116
Software Engineering and Analysis Lab	Aditya Kanade	CSA 224
Distributed Computing Lab	R. C. Hansdah	CSA 228

Visualization and Graphics Lab	Vijay Natarajan	CSA 237
Computer Architecture and Systems Lab	K. Gopinath	CSA 319, 314
Compiler Lab	Y. N. Srikanth	CSA 320
Programming Languages Lab	K. V. Raghavan	CSA 321, 322
Scalable Software Systems Lab	M. K. Ramanathan	CSA 324
Computer Architecture Lab	T. Matthew Jacob	SERC 223
Database Systems Lab	Jayant R. Haritsa	SERC 302
High Performance Computing Lab	R. Govindarajan	SERC 304

<b>Intelligent Systems and Automation</b>		
<b>Lab Name</b>	<b>Faculties in Charge</b>	<b>Room No.</b>
Statistics and Machine Learning Group	Ambedkar Dukkipati	CSA 202, 203
Pattern Analysis and Machine Intelligence Lab	V. Susheela Devi	CSA 226
Intelligence Systems Lab	Shirish K. Shevade	CSA 244
Topic Analysis and Synthesis Lab	M. Narasimha Murty	CSA 246
Machine Learning Lab	Chiranjib Bhattacharyya	CSA 251
Stochastic Systems Lab	Shalabh Bhatnagar	CSA 302, 304
Game Theory Lab	Y. Narahari	CSA 333, 335
Machine and Language Learning Lab	Partha Pratim Talukdar	SERC 403, 404

### ***Departmental Activities***

DCC (Department Curriculum Committee) is a committee of faculty members whose role is primarily concerned with academic issues (new courses, changes to existing courses, allocation of courses to faculty, helping students to choose their M. Tech. projects, evaluation of M. Tech. projects etc.) at the departmental level. Student representatives of M.Tech., M.Tech. (Research), and Ph.D. are also invited to participate in its deliberations. DCC frequently meets the students during the first term and enquires about their difficulties. This is a venue where you can open up and express your feelings through your representatives.

CSA Departmental seminars are conducted frequently. Here research students, faculty members or visiting experts present the results of their research work or emerging research topics. This gives the students an opportunity to keep abreast of current developments.

## **General Information about the Institute and its Surroundings**

### ***Campus walls and entrances***

There's a big wall around the campus. On the south side it runs east west from Prof. CNR Rao circle (also called Tata Institute circle) along the National Highway. On the east side, it runs on New BEL road (also called BEL – HMT road) from Sadashivanagar police station to the east entrance of Ramaiah College most of the way. On the west side it runs from Yeshwantpur tollgate all the way to the west end of Ramaiah College. There are also walls encircling the JN Tata and CSIC auditoria, on Sir C.V. Raman Avenue and on Sankey Road.

The big entrances are the ones at Prof. CNR Rao circle and near Security (open 24 hours on all days). Between CSIC auditorium and the canteen Prakruthi, there is an underbridge that lets you walk across the road. If you are crossing the road directly, please be careful! It is always safer to use the underbridge. If you walk south from CSIC auditorium (and around the ICE building), you will reach the ICE gate that lets you out next to the Maramma temple Circle; this route leads you out of campus towards Malleswaram. The gate is officially open roughly from 8.00 am to 8.00 pm, but there is a side gate through which you can always come in.

Near the health centre, there is a yellow pedestrian overbridge across National Highway four; it takes you to the Gymkhana and the D Mess. There are other small entrances on the west side of campus. One of them is near R block: it leads to the Yeshwanthpur toll gate bus stop and is also useful if you wish to walk to Yeshwanthpur from the hostels. Another entrance is near D Mess; it's useful if you wish to walk to Yeshwanthpur circle from the Gymkhana or D Mess. There is also a D gate on BEL-HMT road, and another gate near the telephone exchange (New BEL Road).

### **How do you get to IISc from the Railway station or the Majestic Bus Stop?**

Get out of the station from platform number 1 and reach the prepaid auto-stand and hire a prepaid auto-rickshaw. Majestic is the central bus stand in Bangalore. If you take a bus from Majestic, wait for a bus that takes you to “Tata Institute” at platform number 22. These include the buses numbered 252, 252E, 265A, 273, 273C, 258, and 275.

### **Shopping and eating out**

The eateries on campus are Kabini, Nesara, Prakruthi and Gymkhana Kiosk. Additionally you might wish to venture out into Malleswaram or Yeshwanthpur. MG Road, Brigade Road, Commercial Street, Kempegowda Road house shopping districts.

During the admission procedure, you shall find a few stores selling basic household necessities such as mattresses, pillows, quilts, buckets, mugs, curtains, brooms, dustpans, etc. opposite the Hostel Office. There is also a shopping center opposite the TMC badminton court that houses a General Store where you can purchase stationery, toiletries, etc., a pharmacy, a tailor, two dry cleaners, a barber and a bakery. If your requirements have not been met, you can also find stores in and around Yeshwanthpur and Malleswaram. Grofers, Big Basket and Amazon Now also perform deliveries straight to your hostel.

There are restaurants along and around New BEL Road. Faasos, FoodPanda and Swiggy deliver food on campus in addition to Pizza Hut, Dominos, McDonalds, etc. YeWoLo provides nearly round the clock food delivery. There are two Malls close by, Orion and Mantri, both have a food court and multiplexes.

## **Frequently Asked Questions**

### **Nobody has any idea what “IISc” is. Help?**

The institute is better known locally as “Tata Institute”.

### **Can I get my travel costs reimbursed?**

Your travel costs to the institute shall be reimbursed by the CSA office. The amount reimbursed will be up to the fare of a single adult second-class train ticket, but you can redeem it even if you arrive by air.

### **Where can I find a photocopier?**

There are two photocopier stores in the institute — one close to the TMC badminton court, and another next to the canteen Prakruthi.

### **Where can I get a bicycle?**

You can purchase a new bicycle in the stores opposite to the Hostel Office during admissions. If you're in the market for something used, the Student Council holds a bicycle drive after September.

### **What banking facilities are available on campus?**

State Bank of India and Canara Bank each have a branch and two ATMs on campus. Note that you may associate your existing SBI account for your scholarship.

### **Where can I get an address proof?**

Your hostel allotment letter is a valid address proof that can be used to subscribe to a BSNL or Lance Fiber Net connection. The postpaid bill for either of these services can be used as a permanent address proof usable outside the institute. You may also open an account at the institute branches of State Bank of India or Canara Bank, following which you can use the pass book as address proof.

### **Which mess should I pick?**

There are four messes in the institute, each serving a different cuisine.

1. A Mess: South Indian, vegetarian
2. B Mess: North Indian, non-vegetarian and vegetarian
3. C Mess: South Indian, non-vegetarian and vegetarian
4. D Mess: North Indian, vegetarian

You may change your mess once every month, subject to availability.

### **What are some eating options inside the institute?**

There are four major eateries available in the institute:

1. Kabini is an affordable canteen right next to the Hostel Office
2. Nesara, a restaurant is situated next to Kabini
3. Prakruthi is a canteen close to the department
4. Nisarga is a snack parlor close to D Gate

### **Is an internet connection available in the hostels?**

Unfortunately, no. You can, if you wish, subscribe to a connection from third party internet service providers such as BSNL (ADSL2+) and Lance Fiber Net (Ethernet). A BSNL connection can be obtained from the BSNL office on campus. You may have to purchase your own router or modem, subject to availability. Internet access is available 24x7 in and near the departments and other institute buildings.

### How do I get access to institute Wi-Fi?

There are two types of access points available on campus, namely:

1. iiscwlan: You require a username and password to log in to these access points. In order to obtain login credentials, please contact the Net Help team (Room 123) at SERC (also known as CDS).
2. eventwlan: You do not need credentials to access these access points. You can find them at important landmarks such as the Faculty Hall and inside the JRD Tata Auditorium.

### How do I change my room?

The Hostel Office allows you to change your room at least 3 months after the date of admission, following which you may not change your room for another three months. The change of room is subject to the availability. For more details, contact the Hostel Office.

### Can I get accommodation for my parents, other relatives or friends?

Accommodation is not available during the admission procedure.

However, later you can book a guest room for your parents or spouse at the Hostel Office.

### What are some useful Telephone Numbers?

IISc has an internal telephone system, with 4 digit extension codes beginning with a 2.

To call these numbers from outside IISc, prefix the number with "2293". Alternatively, you may call 22932001, 02, 03, 04 and 05 and request the operator to forward your call to a specific extension.

2368, 2386, 2468, 229	Department of Computer Science and Automation
2227, 2234	Health Center
2400	Security (Main Gate)

Some other helpful phone numbers (external) are listed below:

9449019048	IISc Snake Helpline (Emergency)
080-22183333	MS Ramaiah Hospital (Emergency)
080-22942915 080-22942914 080-22942804	Sadashivanagar Nagar Police Station

### How do I contact the CSA office?

The CSA office is open on working days (Monday-Friday, except on public holidays) from 9:00am to 5:00pm. If you have any queries, you can send an email to [office@csa.iisc.ernet.in](mailto:office@csa.iisc.ernet.in).

### How do I contact the departmental curriculum committee (DCC)?

The DCC can be contacted via email at [dcc@csa.iisc.ernet.in](mailto:dcc@csa.iisc.ernet.in).

The DCC student representatives can be contacted via email at [dccstudents@csa.iisc.ernet.in](mailto:dccstudents@csa.iisc.ernet.in).

Further details are available on the CSA homepage at <http://www.csa.iisc.ac.in/>.

We wish you a wonderful and rewarding stay at CSA and IISc!

**Schedule for the orientation program**

<b>Monday, 1st August</b>	
<b>Time slot</b>	<b>Event</b>
09:30-11:00	Welcome meeting
11:00-11:30	Tea Break
11:30-12:00	DCC Talk to MTech Students
12:00-12:30	DCC Talk to Research Students
12:30-02:00	Lunch in CSA lawns
02:00-04:00	Course Overview Talks by CSA Faculty
04:00-04:30	Tea Break
04:00-06:00	Photo Session

<b>Tuesday, 2nd August</b>	
<b>Time slot</b>	<b>Event</b>
10:00-11:30	Course Overview Talks by CSA Faculty
11:30-12:00	Tea Break
12:00-12:30	Academic Honesty
12:30-12:40	System + Web
12:40-12:50	Open Day
12:50-01:00	Placements
01:00-02:00	Lunch in CSA lawns
02:00-04:00	Photo Session
04:00-04:30	Tea Break
04:30-06:00	Informal Session