

**Supercomputer Education and Research Centre**  
**Indian Institute of Science**  
INFORMATION BROCHURE FOR M.Sc. (Engg.) STUDENTS

Welcome to Supercomputer Education and Research Centre (SERC) at Indian Institute of Science.

*Please go through the brochure carefully, any specific questions should be directed to your faculty advisor or Department Curriculum Committee (e-mail: dcc@serc.iisc.in). This brochure gives a time line, which will guide you through out your M.Sc. (Engg.) program. There is a check list at the end of this document to serve as your progress tracker.*

## 1 First 6-10 Weeks

In the first few days, you should have completed the centralized registration procedure with the admissions unit. This is typically indicated in your joining letter to IISc. Also, with in the first few days, the SERC Department Curriculum Committee (DCC) holds an orientation session for the incoming students. One of the key feature of the orientation session is that DCC assigns a faculty advisor for you, until an appropriate research advisor is identified. The faculty advisor helps you with the initial paper work and willing to help you to settle down in the campus as well as in SERC. To choose your research advisor, it is a good idea for you to go and visit other labs before you make up your mind. Typically you need to meet with all faculty members in your stream (computer systems or computational science) and get their signatures (on the form given by DCC), before your advisor choice is finalized. The particular stream would have been indicated by you during the research interviews. You should try to finalize the procedure of choosing your advisor before the end of 10 weeks.

In the mean time, depending on your interests and background, the first semester classes to be taken are suggested to you by the DCC/faculty advisor. The faculty advisor should be able to sign on your class registration cards. These registration cards can be collected from Ms. Mallika (e-mail: mallika@serc.iisc.in) at the SERC office (after first week of the semester she is available from 2:30 to 5 pm only). Register for courses that are suited to your interests and potential research areas. Please note that it is compulsory for you to take atleast one math equivalent class as part of research training program. **In all cases, you are required to register for at least 12 credits needed for your Research Training Program (RTP) in the first semester.**

Please visit SERC students lab (Room No: 303) to get your student e-mail id. If you have not visited SERC webpage, it is a good idea to do that to know the available computational facilities. Visit SERC library (Room No: 103) to get your internet, wireless, and SERC systems account.

## 2 End of first year

Hopefully, you have a research advisor and completed the necessary course work. Please refer to student hand book for the exact number of credits and the minimum required CGPA (cumulative grade point average) needed to complete the research training program (RTP). You should have identified/working on a research topic. Make sure that you completed at least minimum required courses by the end of first year. Your required number of credits vary depending on the program you registered and your

qualifications. Always ask your research advisor, if you need any clarifications. Any curriculum related issues should be reported to DCC, directed through your advisor.

Think about taking your General Test, consult your research advisor. Note that the General Test may be waived for students who complete their Research Training Programme within the first two semesters with a CGPA of at least 6.0 out of 8.0. Apply for the waiver to Senate Curriculum Committee (SCC) through your advisor and chairman. Contact Ms. Mallika (e-mail: mallika@serc.iisc.in) at the SERC office for the appropriate form.

### 3 End of one and half years

You should have taken your General Test and successfully completed it. As part of the General Test, you would have proposed your thesis work and given a time line for completing the same. You have a research topic and actively working on it. Definitely you should have completed preliminary literature review on your research topic.

### 4 End of second year

You should have completed major part of your research work. You should have given (or in the process of) your thesis colloquium. **In all cases, MSc(Engg.) colloquium should be given between 2 to 2.5 years or earlier.** You have submitted your thesis and in the process of defending it. Your research work should have lead to a journal/conference publication (or at least in the process of it).

### 5 End of two and half years

You should have submitted and defended your thesis.

### 6 Upgradation to Ph.D programme

Upgradation of the registration to Ph.D is possible by submitting a request to the Chairman of the department through the Research Supervisor. This can be done only if the candidates have taken courses amounting to at least 12 credits and a CGPA of 5.5. Such candidates should complete an RTP of at least 18 credits and the Comprehensive Examination within one year of the upgradation.

## Check list for M.Sc. (Engg.) Students

### 1. First week

- (a) Completed the registration and attended the orientation meeting by the SERC DCC.
- (b) You have a faculty advisor and registered for **at least 12 credits**.
- (c) Gone through the student hand book and got familiarized your self with the requirements for completing your research training program (course work). Courses offered at SERC Web-link: <http://www.serc.iisc.ernet.in/SOI2014.htm>
- (d) Got your SERC e-mail id, wireless account, internet account, and SERC systems account.

### 2. End of 10 weeks

- (a) You have a research advisor.
- (b) Plan/rework your research training program in consultation with your research advisor.

### 3. End of First year

- (a) Completed research training program.
- (b) Identified research topic and preliminary work is in progress.
- (c) Consult your research advisor and apply for general test waiver, if eligible. This can also be applied at the end of first semester, if eligible.

### 4. End of one and half years

- (a) Have a comprehensive plan for your research and have time line for your thesis topic.
- (b) Successfully completed General Test or got a waiver.

### 5. End of two years

- (a) Completed major part of your thesis work.
- (b) Completed thesis colloquium. **In all cases, MSc(Engg.) colloquium should be given between 2 to 2.5 years or earlier.**
- (c) Thesis submitted and (in the process) defended it.
- (d) First author conference/journal publication.

### 6. End of two and half years

- (a) Completed thesis defense

Please note that this check list acts as a set of guide lines to be a successful M.Sc. (Engg.) student at SERC. The best person to approach to assess your progress is your research advisor, so consult him/her at every stage of your M.Sc. (Engg.) program. The DCC will act as over seeing body to make your M.Sc.(Engg.) program successful, contact DCC (e-mail: [dcc@serc.iisc.ernet.in](mailto:dcc@serc.iisc.ernet.in)) for advise or to address your concerns.

## General Guidelines to SERC Students

The students of SERC are required to follow these guidelines (relating to academic and other matters). The rules and regulations for institute students given in the Student Information Handbook also applies to SERC students.

1. SERC students are required to sign the attendance register kept in SERC office (G#02) daily.
2. Application for leave of absence (form available in #103) is to be made in writing to the Chairman through the Faculty Adviser (in case of I Year M.Tech students), Project Guide (for II year M.Tech Students), or Research Supervisor (for Research students).
3. Each student is eligible to take leave of absence for 30 working days in an academic year. For additional leave of absence on medical and other grounds, please refer to the Student Information Handbook.
4. Scholarship bill must be signed by the Student and countersigned by the Faculty Adviser/Project Guide/Research Supervisor every month. The student is responsible for getting the signatures. Completed scholarship bill should be submitted to SERC student office on or before 8th of every month. Scholarship bills of those students who do not get the necessary signatures or who do not sign the attendance register regularly will not be processed in the current month. Students are advised to check every month whether the scholarship amounts have been credited to their bank accounts and any problem related to this must be reported to SERC student office (Ms. Mallika) immediately (within a month or so).
5. Research students must complete and submit the scholarship renewal forms every year in a timely manner in order to receive their scholarships in an uninterrupted manner. Course students must complete the scholarship renewals every semester as indicated in the Student Information Handbook.
6. Course registration must be completed every semester within the stipulated time specified in the Academic Calendar. Completed course registration cards should be given to the respective instructors and the Master card should be given to SERC student office (Ms. Mallika) within this stipulated time. Course registration forms and master cards must be duly signed by the Faculty Adviser/Project Guide/Research Supervisor.
7. Course withdrawal, if any, should be applied using the prescribed form, (available in SERC Student Office) duly signed by the Faculty Adviser/ Project Guide/Research Supervisor and the Course Instructor. The form should be submitted to the SERC student office within the time specified in the academic calendar.
8. New research students must fill up the research registration form after identifying their research supervisors. This should be done within 8 weeks from the date of joining. The research registration form should be submitted to the SERC student office for onward transmission.
9. Maintain **at least 75%** attendance in courses.