# Department of Computational and Data Sciences M.Tech.(Research) Students Orientation

Please go through the brochure carefully, any specific questions should be directed to your faculty advisor or Department Curriculum Committee (e-mail: dcc. cds@iisc. ac. in).

This brochure gives a time line, which will guide you throughout your M.Tech.(Research) program. There is a checklist 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 CDS Department Curriculum Committee (from now on abbreviated as 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 CDS. 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 (CS or CP) 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 finalize the procedure of choosing your advisor and submit all relevant forms before August 14.

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. You will register for the courses using an online registration system, the link for which will be let known by the CDS office. Register for courses that are suited to your interests and potential research areas. Please note that it is compulsory for you to take at least one math equivalent class as part of research training program (RTP). Also, the course on "Research Methods" (offered in second year August term) is mandatory for all research students. In all cases, you are required to register for at least 12 credits needed for your Research Training Program (RTP) in the first semester.

If you have not visited CDS webpage, it is a good idea to do that to know the available computational facilities. Visit SERC office (ground floor) 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. You should complete minimum 12 credits of RTP with minimum CGPA of 7.0 out of 10.0 and one of the

course in the RTP has to be Math or equivalent one. 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.

### 3 End of one and half years

You have secured required CGPA. 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, M.Tech(Research) 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 8.0 out of 10.0. Such candidates should complete an RTP of at least 18 credits (including the credits taken during M.Tech. (Research)) and the Comprehensive Examination within one year of the upgradation. Please refer to student handbook for more details.

# Checklist for M.Tech. (Research) Students

#### 1. First 2 weeks

- Completed the registration and attended the orientation meeting by the CDS DCC.
- Registered for biometric attendance. Have CDS e-mail account (e-mail: maryanita@iisc.ac.in).
- You have a research advisor and registered for atleast 12 credits.
- 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 CDS for the current semester: http://cds.iisc.ac.in/courses/schedule/
- Got your CDS e-mail id, wireless account, internet account, and CDS systems account.
- You have a research advisor.

#### 2. End of 10 weeks

• Plan/rework your research training program in consultation with your research advisor.

#### 3. End of First year

- Completed research training program with at least one Math of equivalent course (12 credits with alteast minimum CGPA of 7.0 out 10.0).
- Identified research topic and preliminary work is in progress.

#### 4. End of one and half years

- Have a comprehensive plan for your research and have time line for your thesis topic.
- Completed all modules of DS 200: Research Methods Course

#### 5. End of two years

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

#### 6. End of two and half years

• Completed thesis defense

Please note that this checklist acts as a set of guidelines to be a successful M.Tech. (Research) student at CDS. The best person to approach to assess your progress is your research advisor, so consult him/her at every stage of your M.Tech. (Research) program. The DCC will act as over seeing body to make your M.Tech.(Research) program successful, contact DCC (e-mail: dcc.cds@iisc.ac.in) for advise or to address your concerns.