

# Department of Computational and Data Sciences

## Ph.D. 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 through out your PhD (Engg.) 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, within the first few days, the CDS Department Curriculum Committee (from now on abbreviated as DCC) holds an orientation session for the incoming students. You will be assigned a research supervisor based on your interests and performance in your research interview. You will consult with your research supervisor to register for the first semester courses. You will register for the courses using an online registration system, the link for which will be let known by the CDS office. The CDS DCC made it compulsory to have at least one math equivalent class as part of your research training program (RTP). Also, the course on “Research Methods” (to be credited during January 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. Please submit all relevant forms before August 14.

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 CDS 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). The current requirement for completing the RTP is minimum of 24 credits (with at least one Math or equivalent course) for Direct Ph.D. candidates and 12 credits (with at least one Math or equivalent course) for regular Ph.D. candidates. The minimum required CGPA for the RTP program is 7.0 out of 10.0. 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. You are strongly encouraged to consult your research advisor for any clarifications. Start thinking about taking your comprehensive exam. Any curriculum related issues should be reported to DCC, directed through your advisor.

### **3 End of Second Year**

You should have taken your comprehensive exam and successfully completed it. On successful completion of the comprehensive exam, your candidacy will be confirmed by the Institute. As part of the comprehensive exam, 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. Think about writing up your initial work for a conference or a journal publication. Definitely you should have completed preliminary literature review on your research topic.

Ph.D students are required to complete the mandatory Student Assistantship Programme (SAP) after the confirmation of their candidacy and before giving department colloquium. SAP can also be completed before the comprehensive exam, check with your research advisor. In CDS, typically SAP involves rendering teaching assistance to a course. Consult the instructors of the interested course for SAP. For more details on the SAP requirements, consult the student information handbook.

### **4 End of third year**

Your research work should have lead to a journal/conference publication (or at least in the process of it). Assess your progress in conjunction with the proposal you have made in your comprehensive exam. Consult with your advisor, if there is a large deviation from what was proposed.

### **5 End of fourth year**

You should have completed major part of your research work and contributed towards journal/conference publication(s). Think about completing your Ph.D. thesis colloquium as well as wrapping up your work. It is a good idea for you to start think what you will like to do after Ph.D.

### **6 End of fifth year**

You should have completed your thesis colloquium and completed your thesis work. In all cases, Ph.D colloquium should be given in the fifth year or earlier. Your thesis is submitted and you are in the process of defending your thesis (or already done it). You have a job lined up or in the process of it.

# Checklist for Ph.D 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: mary@cds.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/>
- Plan your research training program in consultation with your research advisor.
- Got your CDS e-mail id, wireless account, internet account, and CDS systems account.
- You have a research advisor.

## 2. End of First year

- Completed all modules of DS 200: Research Methods Course
- Completed research training program with atleast one Math of equivalent course (24 credits for direct Ph.D. and 12 credits for regular Ph.D. with atleast minimum CGPA of 7.0 out 10.0).
- Identified research topic and preliminary work is in progress.

## 3. End of Second Year

- Have a comprehensive plan for your research and have time line for your thesis topic.
- Contribution towards conference/journal publication.
- Successfully completed comprehensive exam.
- Completed the mandatory Student Assistantship Programme (SAP) before giving department colloquium.

## 4. End of Third Year

- First author conference/journal publication.
- Consult your advisor and assess your progress on your thesis work.

## 5. End of Fourth year

- Completed major part of your thesis work.
- Think about doing your thesis colloquium.
- Think about what to do when you finish your Ph.D.

## 6. End of Fifth year

- Should have finished thesis colloquium. In all cases, Ph.D colloquium should be given in the fifth year or earlier.

- Thesis submitted and (in the process) defended.

Please note that this checklist acts as a set of guidelines to be a successful Ph.D 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 Ph.D program. The DCC will act as over seeing body to make your Ph.D program successful, contact DCC (e-mail: [dcc@cds.iisc.ac.in](mailto:dcc@cds.iisc.ac.in)) for advise or to address your concerns.