Department of Electrical Engineering, IIT Delhi

Orientation for New Phd/MS(R) students: Sem II, 2020-21
About the Department
About the Department: Administrative Structure

- **Head of Department**: Prof. Jayadeva

- **Chairperson of the Department Research Committee (DRC, deals with all matters related to research and PG programmes)**: Prof. I. N. Kar

- **Convenor of the DRC (and ex-officio Coordinator of the PhD and M.S.(R) programmes)**: Prof. S. Janardhanan

- **Coordinators of the M.Tech. programmes, and members of the DRC**:
  - Overall M.Tech. Coordinator – Prof. Manav Bhatnagar
  - Computer Technology – Prof. Tapan K. Gandhi
  - Communication Engineering – Prof. Lalan Kumar
  - Control and Automation – Prof. Subashish Dutta
  - Integrated Electronics and Circuits – Prof. Manan Suri
  - Power Electronics, Electrical Machines and Drives – Prof. Sumit Pramanick
  - Power Systems – Prof. Nilanjan Senroy
About the Department: Faculty

• 50+ Faculty members, with 5 thematic groups (many also members of multiple groups): Computer Technology, Communication Engineering, Control and Automation, Integrated Electronics and Circuits, Power Engineering

• Please see the Department webpages at http://ee.iitd.ac.in/ for all research interests, contact details, etc.

• Generally the Institute, Department, and individual Faculty members will use your official IITD e-mail ID for all communication.

  • So please remember to check this regularly
Ethics and Support
Academic ethics

• High standards of academic honesty and integrity are expected in all your coursework and research work

• Please be thoughtful and careful about avoiding any form of plagiarism, and never giving the impression that someone else’s work or ideas are your own

• Specific policies on these aspects may be conveyed by respective course coordinators for assignments and other evaluation components, especially during the online teaching period

• Whenever in doubt about what counts as plagiarism or what might not be acceptable, please ask your course coordinator (for coursework) or supervisor (for research /project work)
Honour Code

You have already signed this document.

Take it seriously.
Support and Welfare

• For any difficulties or issues you might face with either academic or non-academic aspects of life at IIT Delhi, please feel free to get in touch with us.
  • First point of contact is normally course coordinator for course-specific matters,
  • and programme coordinator (M.Tech./M.S.(R)/Ph D) or research/project supervisor(s) for more general matters.
  • But all faculty members are open to being approached for assistance and advice as needed.

• Also many support mechanisms at the Institute level: key contacts are Associate Dean, Student Welfare (Prof. Reetika Khera); Dean, Student Affairs (Prof. Arvind Nema); Student Counselling Service, and Dean (Academics) (Prof. Shantanu Roy).

• Further details, contacts, etc. given as part of Institute orientation programme.
Research Organization & Academic Requirements
Organizational Roles

- **Supervisor:** your first point of contact, most important
  - You could start with the list of prospective supervisors
  - For EEY: [https://owncloud.iitd.ac.in/nextcloud/index.php/s/eHPTW3GHEaqM7BB](https://owncloud.iitd.ac.in/nextcloud/index.php/s/eHPTW3GHEaqM7BB)
  - For EEZ: [https://owncloud.iitd.ac.in/nextcloud/index.php/s/sp5TXxnerQtzHkA](https://owncloud.iitd.ac.in/nextcloud/index.php/s/sp5TXxnerQtzHkA)

- **Student Research Committee (SRC):**
  - Advised to be formed within 3 months of joining.
  - Comprises of supervisor, one expert from the department and one from outside the department, and a chair-person
  - Gives advice in addition to the supervisor, meets you at least once every semester
  - Continuously evaluates your progress in the programme

- **Departmental Research Committee (DRC)**
  - Responsible for all the research scholars in the department (>400)
  - All your requests (academic or non-academic) require DRC’s approval before they are considered by various higher-level functionaries in the department and institute
Steps for a Quick Start

• Area of research (thematic groups, supervisor)
  • Talk to prospective supervisors (see links on previous page)
  • If you wish, you may talk to a couple of other faculty members in your research area of interest
  • Finalize on a supervisor and a research area (thesis topic comes much later)
  • If you are joining a project sponsored position, PI of the project will be your supervisor
# Minimum Requirements of EE

<table>
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<tr>
<th>Programme</th>
<th>MHRD Stipend Max. Duration for Full-time Students only (semesters)</th>
<th>Validity of Registration (semesters)</th>
<th>Course Credits</th>
<th>Mandatory Requirements</th>
<th>Others</th>
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<tr>
<td>MS(R)</td>
<td>(i) Full-time: 6 (ii) Part-time: 10 if joined initially as part-time, else 6</td>
<td>1. Full-time: must complete 15 credits by end of sem. III, sem. I min. 9 and max. 15 credits 2. Part-time: must complete 15 credits by end of sem. IV, sem. I and II min. 3 and max. 12 credits 3. If SGPA &lt; 7 (i) if on probation, termination (ii) Put on probation</td>
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<td>1. 36 credits from Project 2. Must get a X grade in ELD895 every sem. 3. &quot;U&quot; grade in any two sems. in ELD895 result in termination 4. Thesis defense 5. One publication as first author (peer reviewed preferred)</td>
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<td>PhD</td>
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<td>1. Must get a X grade in DTD899 every sem. 2. Two &quot;U&quot; grads in any two sems. in DTD899 result in termination 3. SRC must be form within 90 days of registration 4. Written and Oral Comprehensive exams should be cleared (max. 2 chances will be given) before end of sem.III for full-time and before end of sem.IV for part-time students 5. Two publications as first author (peer-reviewed preferred) 6. Pre-PhD synopsis defense 7. PhD thesis defense</td>
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Courses and Grading
Advice on Course Credits

• Default advice
  • Course level must be 700 and above
  • Must be a lecture course, e.g. ELL7XX or ELL8XX
  • Ideally target core courses for MTech program in your thematic group or research area
  • Try to spread your course work over the allowed span

• Choice of Courses
  • Browse through the list of courses offered in the current semester (https://eacademics.iitd.ac.in/sportal) for courses in your area of interest.
  • You may make use of the Courses of Study document available at https://home.iitd.ac.in/curriculum.php to get idea of course contents.
  • Recommended : Seek advice of prospective supervisors.
Academic calendar and timetabiling

• Normal semesters are Jul—Nov and Jan—May.
  • Current modifications due to COVID-19.
  • Please see https://home.iitd.ac.in/academic-calendar.php for latest calendars and schedules

• Slotting system: Lettered slots ( A, B, C, etc.).
  • Each slot denotes either three 1 - hour or two 1.5 - hour lecture slots per week. Every lecture course is offered in one of these slots ( exception: 'X' slot allows for flexible scheduling).
  • All info about course slots and slotting pattern at http://timetable.iitd.ac.in/.
Slotting Pattern

Slot timings (General – 4 cycles)

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See: [https://timetable.iitd.ac.in/schedule/slotting%20pattern%20jan%20202018.pdf](https://timetable.iitd.ac.in/schedule/slotting%20pattern%20jan%20202018.pdf)
Course Policies

• Every course has a Course Coordinator, responsible for overseeing all aspects of course policy, evaluation, logistics etc.

• Evaluation schema: Normally one Major exam, two Minor exams; but currently only one Minor due to COVID-19.

• All courses will have other components like assignments, quizzes, term papers/projects etc. Exact evaluation policy to be announced by faculty members in first class of a course.

• Minimum of 75% attendance required normally; no attendance weightage during online COVID semesters, but regular attendance expected.

• Please contact course coordinator or TAs for any issues with participating in classes, doubts on course material, or concerns/queries about any other aspect of a course.
Grading policies

- Letter grading system: A, A-, B, B-, etc. Each grade associated with grade points out of 10: A is 10/10, A- is 9/10, etc.
- In general, grading is relative: based on distribution of marks in a course, no pre-decided grade boundaries.
- Cumulative Grade Point Average (CGPA) computed by averaging grade points weighted by no. of credits earned for a course. Normally minimum CGPA requirements for continuation of scholarship /assistantship, as well as registration.
- Please see Courses of Study (https://home.iitd.ac.in/curriculum.php) for all details and rules pertaining to the above and all other curricular and evaluation matters. Also includes many special exceptions and relaxations during online COVID semesters.
Fellowships and Upgradation
Special fellowships for PhD students

- The most lucrative national scheme is the Prime Minister's Research Fellowship, which is now also open to current first/second-year students (lateral entry channel). Please see https://dec2020.pmrf.in/ for eligibility criteria and application details.

- Many industrial fellowships, depending on area of work: offered by organisations like Google, TCS, SERB-CII (http://www.primeministerfellowshipscheme.in/) etc. Please see respective websites or announcements circulated from time to time.
Upgrade from MS(R) to PhD

• Earliest it can happen is after sem. I
• SGPA/CGPA>8 and Credits>12
• Need recommendation from SRC and then DRC for the upgrade as well as transfer of earned credits to the new programme
• Maximum duration of the PhD program will still be 14 semesters but counted from date of joining the MS(R) programme
• MS(R) to MTech (downgrade) is not allowed in EE
Exit from PhD

• PhD is a long-term commitment and a lot can change over this period

• If a PhD student has earned required credits and is unable to pursue much longer, he/she can exit with an MS(R) degree by completing remaining credit and other requirements for MS(R) upon recommendation of SRC and DRC
Some Useful Links

• Rules and regulations: https://home.iitd.ac.in/curriculum.php
• EE Department Research Areas: http://ee.iitd.ac.in/research.html
• IITD Time-Table and Calendar: http://timetable.iitd.ac.in/
• PG Section forms for students: https://internal.iitd.ernet.in/?q=content/forms
• Moodle: https://moodle.iitd.ac.in/login/index.php
• Turnitin: https://www.turnitin.com/login_page.asp?lang=en_us
Thank You

Q & A