Computer Science Orientation

Prasad Tadepalli
Computer Science Graduate Head Advisor

Terminology you should know

- Academic Advisor: Advises on your course work
- Major Professor: Directs your research project and replaces the academic advisor.
- Graduate Head Advisor: Advises about general requirements.
- Ph.D. Committee: Needs 4 professors and a graduate council representative (GCR). 3 from CS.
- M.S./ M.Eng. Committee: Needs 3 professors. GSR if thesis option.

M.S./M.Eng. Degree Requirements

- Undergraduate core requirement
- 45 hours of graduate level courses, with at most 6 credits of "blanket-numbered" (50X) courses
- At least 2 courses each from Theory, Systems and real-world computing with 3.0 GPA
- First year attendance in the weekly colloquium
- A coherent set of 3 courses in the research area
- M.S. Thesis: 9 credits. A research contribution and a publishable paper OR
- M.S. Project: 6 credits. A significant piece of software/system design/experimental work/theory/survey paper/... and a project report.
- M.Eng: 3 credits of research/project work
- A final oral exam on research and course work.

Ph.D Degree Requirements

- Undergraduate core requirement
- 108 hours of graduate level courses with at most 15 hours of blanket numbered courses
- Passing Ph.D. qualifier
- CS515 (Algorithms), CS517 (Theory of Computation)
- A minimum of three courses each from 3 areas
  - Theoretical CS, AI, Computer Systems, Programming Languages, Software Engineering, Computer Vision and Graphics, Any other area approved by the student's committee
- One year of colloquium attendance
- Successful completion of preliminary examination
- A Ph.D. dissertation for 36 credits (CS 603)
- Passing a final oral defense of the thesis

Ph.D. Degree Timeline

1. Qualifying exam: Written & oral assessment of:
   1. Research potential. Could be based on student's own research or a literature survey as determined by the student's program committee.
   2. Course work preparation. Based on written questions or topics given in advance and followed up in the oral exam.
   - When: 3rd-4th quarter of study if you have an M.S. degree
     - [If only a B.S. degree, then given an additional year]
2. Program meeting: Approval of PhD course of study
   - When: 4th quarter of study
3. Preliminary exam: Assessment of written thesis proposal and oral presentation of the proposal
   - When: 3'rd year of study
4. Final defense: Oral presentation and defense of dissertation
   - When: At completion of research and dissertation writing

Undergraduate Core

Purpose: To ensure that all students have the core background in Computer Science.

Areas:

- Automata and Formal Languages (CS321)
- Algorithms and Data Structures (CS325)
- Operating Systems (CS411)
- Computer Architecture (CS472 or ECE572 or CS570)
- Translators (CS480)

  or Programming Languages (CS381)

Time Limit: Must complete by the first year.

Important: Fill your course equivalency forms and get them approved by your academic advisor this week or the next. Give it to Shannon Thompson.

Submitting MS/MEng or PhD Program

- A Program of Study: A "contract" of the courses taken/to be taken with your committee.
- Must file by end 2nd term of study or 18 hrs (MS/MEng) or end of 1 year (PhD).
- Consult:
  - Major advisor
  - M.S./M.Eng./Ph.D. Program Guidelines
    - http://eecs.oregonstate.edu/graduate/ece/advising.html
    - On-line Forms
    - http://oregonstate.edu/dept/grad_school/current/forms.html
  - Graduate Advisor
  - Graduate School
    - http://oregonstate.edu/dept/grad_school

CS Courses Offered in the Fall

- CS515 Algorithms and Data Structures
- CS519 Digital Image Processing
- CS519 HCI Research Methods
- CS527 Error Correcting Codes
- CS531 Artificial Intelligence
- CS536 Introduction to Graphical Models
- CS550 Introduction to Computer Graphics
- CS554 Geometric Modeling in Computer Graphics
- CS561 Software Engineering
- ECE572 Computer Architecture

Preparing to be a GRA

- Learn about the research in the department. Talk to the professors and their students. Study their papers.
- Attend reading groups and research project meetings to learn about research. Get professor's permission to attend the project meetings.
- Use 501 and 505 credits to read papers, discuss them with a professor and work on something useful.
- Start thinking about research from day one! Talk to professors about papers to read, possible research topics, and things to do.

Registration

- Registration/term
  - 9 credits - Full time w/no funding
  - 12 credits – Full time w/Scholarship
  - 16 credits – All Graduate GTA/GRA's
- Students must register every academic term they are students other than the summer
- Need to apply for leave and get approval if they are planning to do an internship etc. during academic year
- Hints
  - Register for something immediately
  - Complete web registration during 1st week
  - Avoid hidden fees: Don't add/drop after 1st week.

Seminar, Thesis, Blanket Credits

- CS 507 – Seminar/Colloquium, 1 cr, Section 1
  - Required for all grads in the first year. Pass/NoPass.
  - Weng-Keen Wong, coordinator, wong@eecs.orst.edu, http://eecs.oregonstate.edu/graduate/colloquium
- CS 507 – Seminar/Grad Intro, 1 cr, Section 2
  - Recommended for all new graduate students (Fall term only). Pass/No Pass
  - Run by officers of the EECS grad student association
- CS 507 – Seminar/GTA Leadership, 1 cr,, Section 3
  - Required for all graduate teaching assistants (Fall term only). Pass/No Pass.
- CS 503/603 – Thesis, 1-16 credits
  - Register using the CRN for your major professor
  - Ungraded (R=reserved)
- CS 501/601, 505/605, 506/606 - Blanket Credits, 1-16 cr
  - Need Instructor and Departmental Approval to register
    - http://eecs.oregonstate.edu/graduate/forms/
    - Email approval form: blanket.txt
  - 501/601 and 505/605, Pass/No Pass
  - 506/606, graded

Textbooks

- Textbooks for sale at the Memorial Union and on-line resources.
- Textbook list on-line at:
  - http://www.bookstore.mu.orst.edu/Textbooks.asp
- If you are TA for a class, check-out book from the main office in KEC 1148.

Academic Dishonesty

- "Presenting, as your own work, material produced by or in collaboration with others, or permitting or assisting others to present your work as their own without proper acknowledgment" http://eecs.oregonstate.edu/graduate/advising/dishonesty.html
- Punishments for dishonesty range from getting an F in the course to getting terminated.
- Don't even think about it!!

Cultural Associations

- Chinese Students Association
- Indian Students Association
- ENGR mailing lists
- https://secure.engr.oregonstate.edu/mailman/listinfo
- Grad email list (unmoderated): eecs-grad-talk@engr.orst.edu
- CSGSA: Graduate Student Association
- Don't forget the fall festival this weekend!