CSE

Computer Science & Engineering
Graduate Program

Prof. Thomas Wenisch

Graduate Recruiting & Admissions

M UNIVERSITY OF MICHIGAN

PhD Goals

- **Meaningfully extend the body of knowledge in Computer Science & Engineering via original research**

- **Become the world's foremost expert in the narrow topic of your dissertation**

- **Enter as a student; leave as a colleague**

Who to talk to?

1. **Academic Advisor**
   - Assigned when you arrive
   - Initial point of contact for selecting courses

2. **Research Advisor**
   - Selected by mutual consent within 1st year
   - Guides directed study, dissertation research

3. **Dawn Freysinger**
   - Administrative matters; confirming you are following rules

4. **Prof. Ben Kuipers (Grad Program Committee Chair)**
   - Petitions, concerns, questions about degree program

CSE Grad Program Stages

1. **Qualification**
   - **Coursework & directed study**

2. **Candidacy**
   - **Qualifying exam & Cognate**

3. **Dissertation & Defense**
   - **Proposal & Defense**

PhD Coursework

- **Breadth Coursework**
  - **3 courses in 3 different areas (HW, SW, Intel Sys, Theory)**
  - **Some 400-level SW courses count as ½**
  - **B+ or better**
  - **Equivalency allowed**

- **Depth Coursework**
  - **Any 2 courses on Depth list; at least 1 must be "starred"**
  - **A- or better**
  - **No equivalency permitted**

- **Rackham Cognate (4 grad credits outside CSE)**

Early Research Requirements

- **Directed Study within first 2 semesters**
  - **At least 1 credit of 599 or 699**
  - **Academic/research advisor can waive**

- **1st Summer research requirement**
  - **Summer independent study with research advisor**
  - **Intent is to prepare for the qualifying exam**
  - **Must be done in Ann Arbor (can waive via petition)**
  - **Completing this is a condition of financial aid offer**

Qualifying Exam

- **Must present original research project to faculty panel**
  - 3 faculty selected by grad committee
    (who are not involved in the research)
  - Directed study report (~typical research paper in your field)
  - ~45 minute presentation
  - ~45 minute Q&A
  - Deadline
    - Joined program w/o MS: 4 semesters
    - Already have an MS: 3 semesters

Proposal & Defense

- **Thesis Committee**
  - **Selected by you; chaired by your advisor**
  - **3 CSE faculty + 1 "Cognate" faculty**

- **Proposal**
  - **Oral & written presentation to committee**
  - **Deadline**
    - Joined program w/o MS: 7 semesters
    - Already have an MS: 5 semesters

- **Defense**
  - **Oral & written presentation to the public**
  - **Deadline**
    - Joined program w/o MS: 12 semesters
    - Already have an MS: 10 semesters

Getting an MS along the way

- **Complete PhD coursework & Rackham Cognate**

- **Achieve a total of 30 credits through a combination of**
  - **Approved CSE technical courses**
  - **Up to 6 hours of seminar (598) and directed study (599)**
  - **Up to 18 hours of PhD-oriented research (699)**