Welcome to the CS Ph.D. Program!

Get Connected!

- free conversational English classes if needed
- read web pages: www.cs.umass.edu/csinfo/gradinfo/grad.html
- talk to fellow students and faculty
- Monday morning coffee
- read and reply to your email every day!

Learn Computer Science and Get Involved in Research!

- courses
- reading
- talking and working with faculty, students
- dept. colloquia; first distinguished lecture Sept. 10
- lab description seminars (TBA)
- other department seminars that interest you
Choose favorite area and advisor!

• join the group whose work you are most excited about

• you may change your mind and switch groups

• by beginning of next summer you should be connected and at least partially supported by your chosen research group!
Advice for a Successful Graduate Experience

• Have fun
• Learn
  – find out about exciting new research
  – build up your background knowledge
• Build relationships
• Find an advisor
• Learn what research is about and get involved.
• Get organized.
  – work efficiently
  – take some time off for rest, relaxation, and fun
  – get enough sleep
  – eat healthily
  – get exercise
Core Courses

The core courses are graded on an absolute scale. Our goal is to test for a comprehensive mastery of the subject matter.

Systems: There are three groups of systems core courses:

1. Hardware: CMPSCI 635
2. Software: CMPSCI 610, 620, 621, 630, 645, 646, 653, 677
3. Hardware/Software Links: CMPSCI 610, 677

Theory: CMPSCI 601 and 611

AI: CMPSCI 683 is a required core course in both the M.S. and the Ph.D. curriculum. Other AI core courses include: CMPSCI 603, 686, 687, and 689.
The Ph.D. requires six core courses.

(a) Three systems, two theory (CMPSCI 601, 611), and one in AI (CMPSCI 683); or
(b) Two systems, two theory, and two AI.

Systems students must take option (a). See the grad program webpages for more detail!

Sometimes possible to place out of a core course. We want to know that you have good background in broad areas of computer science. **We do not want you to repeat work you have already done.** Speak first to professors teaching the core courses about possibly placing out of them.
Students are **strongly urged** to take **no more than one core course per semester**. A “typical” graduate student course schedule would be something like the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>core (3cr)</td>
<td>core (3cr)</td>
</tr>
<tr>
<td></td>
<td>non-core (3cr)</td>
<td>non-core (3cr)</td>
</tr>
<tr>
<td></td>
<td>RA/TA</td>
<td>RA/TA</td>
</tr>
<tr>
<td>2</td>
<td>core (3cr)</td>
<td>core (3cr)</td>
</tr>
<tr>
<td></td>
<td>non-core (3cr)</td>
<td>MA/Syn (begun)</td>
</tr>
<tr>
<td></td>
<td>RA/TA</td>
<td>RA overlaps project</td>
</tr>
<tr>
<td>3</td>
<td>core (3cr)</td>
<td>core (3cr)</td>
</tr>
<tr>
<td></td>
<td>MA/Syn (completed, 6cr)</td>
<td>non-core (3cr)</td>
</tr>
<tr>
<td></td>
<td>RA overlaps portfolio complete</td>
<td>RA/TA</td>
</tr>
<tr>
<td>4</td>
<td>non-core (6cr)</td>
<td>dissertation (9cr)</td>
</tr>
<tr>
<td></td>
<td>RA/TA</td>
<td>RA/TA</td>
</tr>
<tr>
<td>5</td>
<td>dissertation (9cr)</td>
<td>non-core (6cr)</td>
</tr>
<tr>
<td></td>
<td>RA/TA</td>
<td>RA/TA</td>
</tr>
</tbody>
</table>
Milestones:

- At the end of 3 semesters: **Progress Report**
- At the end of 4 semesters: **Synthesis proposed**
- Near the end of 5 semesters: **Portfolio**

**Portfolio:** Ph.D. candidacy exam: attempt to evaluate the whole person. Is he or she ready and able to begin Ph.D. research.

- General knowledge of computer science: 6 core courses with grades of A/B or better.
- Evidence of research
- Synthesis: a project that significantly combines two different areas of computer science. For those students doing a master’s project, synthesis may be a part of the master’s project.
- Letters of recommendation: several faculty members should have gotten to know you and be able to attest to your intelligence, taste, industriousness, originality, i.e., probable ability to complete the Ph.D. well.