

## **CIS Benchmarks for satisfactory progress towards the Ph.D.**

- First year
  - o Pass at least 2 of the 8 **WPE 1** exams.
  - o Students generally take at least **one independent study** with their potential research advisor(s).
  - o Students must find a research advisor before the end of their second semester.
  
- Second year
  - o Pass the required 4 of the 8 **WPE 1** exams. The four exams must include at least one each from the following two buckets: Foundations (500, 502, 511, 520), and Systems (501, 505, 548, 555).
  - o Pass the **WPE II** – The WPE II committee, consisting of 3 faculty (chaired by someone other than the student’s advisor), will determine if the student’s contribution is sufficient based on a paper and a presentation. The WPE II may be passed based on either a WPE II paper or a Masters thesis.
  - o The **Teaching Practicum** should be fulfilled; it may be postponed at the request of the advisor for students who have not passed all sections of the WPE 1.
  - o Penn is required to certify to the English fluency of all students acting as teaching assistants whose native language is other than English. Penn’s English Language Program administers the **English Fluency** test.
  
- Third year
  - o Students must assemble a thesis committee of at least 3 Penn faculty, (the dissertation advisor is not one of the 3), and one external committee member and present them a five page **description of proposed research**. (The external need not attend the meeting.) If needed the thesis committee may be changed prior to the thesis proposal.
  
- Fourth year
  - o Students should defend a thesis proposal to their thesis committee.
  
- Further years
  - o The student must meet annually with the thesis committee (minus the external). **The thesis proposal must be defended to the thesis committee at least one year before the final defense**. The external member of the thesis committee is only required to attend the thesis proposal and the final thesis defense.
  - o Ph.D. students must take four seminar courses: CIS 600/level courses, CIS 800/PhD Special Topic Seminars or designated CIS 700/Special Topic courses.

*Each doctoral student has a worksheet accessible through PennIntouch, which both the student and advisor can access.*

*Information on the above doctoral degree requirements can be found at <http://www.cis.upenn.edu/current-students/graduate/phd/index.php>*