

# Critical Path Chart For A Typical Doctoral Degree In Computer Science

## 1. Enter the Ph.D. program

### A. Complete prerequisites (if applicable)

### B. Complete Ph. D. courses

30 credit hours beyond the master's

2-3 credit hours of CS 735 during the first year (with a technical report);

Two computer science seminar courses; at least one in the first year

Required courses:  
CS 525, 26, 554, 581, 625, 626, 631, 632, 655, 680, 681, 730(12-24 hours)

### C. Complete the language and research skills requirement

Two of:

1. 400 level foreign language
2. Statistics or probability
3. Computer document preparation and library tools

### D. Complete the qualifying examinations

Select three examinations with at least one from each of two categories:

#### Systems

1. Computer architecture (CS 525, CS 625)
2. Compiler design (CS 580, CS 681)
3. Operating systems (CS 554, CS 631)

#### Theory

4. Design and analysis of algorithms (CS 531, CS 631)
5. Theory of computation (CS 580, CS 680)

First examination no later than the first time offered after completing 15 credit hours.

Second examination no later than the first time offered after completing 30 credit hours.

Third examination no later than the first time offered after completing 45 credit hours.

### E. Complete the dissertation

1. Select dissertation advisor.
2. Select dissertation committee
3. Select dissertation topic
4. Secure topic approval from committee
5. Pass preliminary examination with one year of qualifying examination
6. Complete [The Graduate College Forms](#)
7. Schedule oral defense
8. Apply for graduation audit
9. Submit electronic or standard dissertation form
10. Complete oral defense
11. Submit revised dissertation

## 2. Graduate

