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# Annual Review of Doctoral Students – Guidelines
*Department of Computer Science*
*William & Mary*
*January 2022*

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The faculty reviews the progress of each PhD student toward his/her degree at least once each year, typically in the Spring semester. Each student's case for review is presented to the faculty by a faculty advocate, ordinarily the student's advisor. (Students will be notified two weeks prior to the review and, at that time, given the option to choose their faculty advocate.) In this review the faculty considers each student's academic performance and status with respect to the faculty's expectations. Both grades and research accomplishments are considered. This document is intended to help students understand the faculty's expectations of the typical PhD student.

The usual outcome of a student review will be to continue the student in the program, perhaps with specific suggestions about actions the student should take prior to the next review. In unusual circumstances, however, a student may be placed on probation until certain course or grade requirements are met, or until certain research accomplishments have been attained. In more extreme circumstances, a student may be required to withdraw from the program for a specific period of time, or forever. In any case, the outcome of the review will be presented to the student in writing.

# 1 Course Requirements

Students seeking the Ph.D. in computer science must complete eight courses taken in the Computer Science Department at William and Mary.

1. Six courses must be chosen from 600 level courses, excluding CSCI 666 (Directed Studies), CSCI 685 (Colloquium), 690 (Readings in Computer Science) and all courses with numbers 6x8. Also excluded are the courses previously numbered CSCI 670 (Colloquium) and CSCI 695 (Research). A student may not use courses taken in another department nor CSCI courses designated as Computational Operations Research courses (last digit in the course number is an 8), to satisfy degree requirements without prior written approval of the student's advisor and the Graduate Admissions Committee.

2. The remaining two courses must be chosen from 700 courses, excluding CSCI 700 (MS Thesis), CSCI 708 (Research Project in Computational Operations Research), CSCI 710 (Research Project), CSCI 766 (Directed Studies), CS 785 (Colloquium), CS 790 (Readings in Computer Science. Also excluded are the courses previously numbered CSCI 770 (Colloquium) and CSCI 795 (Research). The objective of these courses is to engage the student in the literature and methods of at least one active research area.

3. For the Degree of Doctor of Philosophy with a specialization in computational science the student must satisfy all the department's requirements for the degree of Doctor of Philosophy. In support of the specialization in computational science, the student must take the CS 649 course, and at least one graduate course from outside the department or a CSCI course designated as Computational Operations Research course (last digit in the course number is an 8). If two or more graduate courses outside the department are taken, only one of them can be used to satisfy the department's eight-course requirement. In all cases, the grade point average will be based on the seven courses taken inside the department. In addition there will be a three-person computational science advisory committee requirement. For details see the *Graduate Arts and Sciences Program Catalog.*

*All of the eight required courses must be taken at William & Mary and for credit (not audit). Furthermore, you must obtain a GPA of at least 3.7 among seven of these eight courses, with no grade lower than B-.* In addition to these required courses, other courses (if any) you may be required to take will be determined by you and your advisor, depending on your background and research interests.

## 2    Composition of Ph.D. Committees

A student's Candidacy Committee will consist of three tenure-track members of this department. The student's primary research advisor will be one of the members of this committee and will chair it.

A candidate's Thesis Proposal Committee for the oral preliminary examination will consist of four people; ordinarily it will consist of the candidate's Candidacy Committee augmented by an additional faculty member. In any case, three members must satisfy the composition requirements of the Candidacy Committee. The additional may be either a tenure-track member of this department or an affiliated member of it, and will be assigned by the department after admission into candidacy.

A candidates' Thesis Committee will consist of at least five people; ordinarily it will consist of the candidate's Thesis Proposal Committee augmented by an additional member. In any case four members must satisfy the composition requirements of the Thesis Proposal Committee. The additional member will be the external member of the committee; she/he must be from outside the Computer Science Department and may be from outside of William & Mary. In accordance with University rules, this person must not have an affiliation with the Department. Ordinarily this person will be chosen for his/her special knowledge of the candidate's research area. The Thesis Committee will conduct the final defense examination.

# 3. Examinations

● *Candidacy.* You cannot be admitted to candidacy without a research advisor and an advisory committee; application for candidacy is a process *you* must initiate. In particular, by the time the eight required courses are completed, you should have selected a principal research advisor, formed a Candidacy Committee and presented your credentials to the CS faculty for acceptance into candidacy. At the time of admission to candidacy, the student and his or her research advisor will be expected to demonstrate how the courses have met the objective listed in the *Course Requirements* section.

● *Preliminary Qualifying Exam.* After acceptance into candidacy, you must prepare for and pass the thesis proposal exam. The basis for this exam will be a PhD research proposal – a document written by you, based on your study of the literature relevant to your research area. The exam will test you in your chosen area of research to assure a level of preparation appropriate to writing a dissertation. This exam is oral, will be conducted by your Thesis Proposal Committee, and will be open to the CS faculty and any other outside persons the department may invite. The examination will consist of three parts: a 45 minute presentation, and questions & answers session, and a proposal dissertation text. To pass the oral examination, the student must pass all three components. The student will need to redo any part they did not pass. This exam is recommended to be completed within two years of acceptance into candidacy. To schedule this exam, the student must advertise the oral examination at least two weeks in advance. The announcement must include day/time and location/form of the examination, provide unrestricted access to the proposal dissertation (either electronically or by placing a hard coy in the CS main office, the area of research and the advisor, an abstract of the proposal, and a short bio. Exams may not be held when the university is closed.

● *Pre-Dissertation Defense Examination.* The pre-defense examination consists of three components: a 45-minute oral presentation, a question & answer session, and the dissertation text. A student only passes the pre-defense when a passing grade is obtained for each of the three components from each Thesis Committee member. The student and his or her principal research advisor must confer with the Thesis Committee on the form and order of each of the three components. The student should expect at least five (5) weeks for the full pre-defense process to complete. There is no firm upper-limit on the duration of the pre-defense process. We expect the student to pass all the components within their first attempt. A passing grade on the pre-defense examination does not guarantee a successful final defense. The student is responsible to obtaining and returning all necessary forms from the Computer Science office. The pre-defense process cannot begin until there is an approved committee appointment form, signed by the Dean of Graduate Studies & Research, on file in the CS main office.

● *Dissertation Defense.* You are allowed to schedule the dissertation defense only after you have passed the pre-defense examination. The dissertation defense is an examination conducted by your Thesis Committee and is open to the public. The public examination is directly followed by a closed-door deliberation by the Thesis Committee, and a public proclamation afterward of the outcome. To schedule the final dissertation defense, the student must:

1. Provide, at least 14 days prior to the scheduled exam, unrestricted access to an electronic copy of the dissertation, or alternatively place a complete hard copy of the dissertation in the CS main office.
2. Announce the pending exam. The announcement must include the day/time/location of the exam, the title of the dissertation, and if appropriate a link to the electronic copy of the text, and a brief abstract. Also included is a short bio of the student accompanied by a recent photo. The CS main office will assist with this requirement. Exams may not be held when the university is closed.

● *Residency.* Doctoral students admitted prior to Fall 2018 are required to spend at least one academic year in continuous residence as a full-time student at William & Mary after completion of the MS requirements. If admitted into our PhD program with a BS only and if you chose not get a MS degree as you work toward the PhD, then you will need to fulfill the residency requirement after completing the eight required PhD courses. Doctoral students admitted starting in Fall 2018 or later, must complete 24 credits of Doctoral Dissertation as part of their degree requirements.

Note this important University-wide rule for PhD students (including part-time PhD students): *all requirements for the doctoral degree must be completed within* seven *calendar years of the time the student is admitted to the doctoral program (including any calendar years spent in the MS program).*

● *Off-campus Research:* Up to one year of cumulative off-campus research is allowed. Each extended research stay or internship should be requested and approved by the graduate director. Excluded are conference presentations, short (< 5 days) visits, and students who have completed their research and only need to write their dissertation.

● *Graduation.* Students must adhere to university deadlines for declaring their intention to graduate. Typically this includes completing the online graduation application form (Notice of Candidacy Form) approximately ONE YEAR in advance. Further, students must declare their intention in writing to the computer science department (email is sufficient) prior to the start of classes in the semester they intend to graduate. In the case of summer graduation, the student must declare before the start of the previous spring semester. Failure to do so will result in a delay of graduation for at least one semester.

The process for submitting your dissertation is described in detail on the Graduate Studies & Research webpage. Please refer to this webpage frequently as you prepare to defend your dissertation and graduate.

*Approved: January 17, 2022*