

# Important Information For CMSC Ph.D. students

CMSC Graduate Committee

January 2004

## 1 TIMELINES/MILESTONES FOR CMSC Ph.D. STUDENTS

The following list presents the milestones and deadlines for CMSC Ph.D. students. Failure to meet any of the deadlines could result in penalties including, but not limited to: loss of financial support, academic probation, dismissal from the program.

Some of you may already met some of the milestones here, e.g. finished up with coursework, passed comprehensive, etc. Please ensure that you follow all the milestones that apply to your specific case. When in doubt, please ask the Graduate Program Director.

This document will be integrated into the Graduate Handbook shortly.

1. **Determine Coursework:** Evaluate the Comprehensive Exam syllabus requirements and take appropriate courses in consultation with your temporary or research advisor.

If you already have an M.S. degree from elsewhere, determine which of these can be counted towards the Ph.D. degree course requirements (and later apply for formal course-equivalency credits).

2. **Research Experience Evidence:** By the end of the SECOND semester in residence (May 31 for Fall starts and Dec 31 for Spring starts), the student should submit: (i) A research statement outlining the student's research activities in the first year; AND (ii) a statement of support from a faculty member potentially interested to be the student's RESEARCH advisor. The research experience can be obtained by registering for at least 3 credits of CMSC 699 with a faculty member and/or working on research publications.

Satisfactory evidence of research, strong academic performance and positive TA evaluations are some of the pre-requisites for continued Departmental TA support in the second and subsequent years.

3. **Comprehensive Examinations:** Successfully pass the comprehensive exam by the end of the FOURTH semester in residence (FIFTH SEMESTER for part-time students). You are allowed at most TWO attempts WITHIN this specified time limit. Comprehensive Examinations are typically offered in the week before classes start.

For example, if you are a full-time student who started in Fall 2002, you *\*have\** to pass the Comprehensive Examination by the end of Summer 2004, i.e. just before classes start

in August 2004. Likewise, if you are a full-time student who started in Spring 2003, you \*have\* to pass the Comprehensive Examination before classes start in January 2005.

**Note: You may start taking CMSC 899 (Dissertation) credits in the semester that you passed the Comprehensive Examination.** Note that you need at least 12 credits of CMSC 899 for the Ph.D. degree.

4. **Program of Study/Research Advisor:** File the CSEE Ph.D. Program of Study: By the end of the FOURTH semester in residence: (i) Select a research advisor and FILE the research advisor form; and (ii) File a Program of Study form that lists all courses taken so far and the courses planned to be taken that will satisfy the 33 course credit requirements.

Course equivalency requests for graduate courses taken elsewhere should have been submitted and approved BEFORE submitting the Ph.D. program of study.

**Note:** if there are changes to your program of study after you have filed it, then you should file the updated program of study with the Dept. for approval.

5. **Research Progress Form:** After passing the comprehensive exam, file a Research Progress Form by April 15th EACH year until graduation.

This report is for the period covering Apr 1st of preceding year until March 30th of the current year. This includes latest CV, research projects involved in, publications – submitted, accepted, appeared, conferences attended/presented, awards received, etc.

The progress form will also include a brief statement from the research advisor on the student's research progress.

6. **Preliminary Examination/Admission to Candidacy:** Successfully PASS the Ph.D. Preliminary exam by the end of the FOURTH year (FIFTH year for Part-time Students) after starting the PhD program. The Preliminary Examination may be attempted only after passing the Comprehensive Examination.

After completing the 33 credits of graduate coursework required for the Ph.D. degree AND passing the Ph.D. Preliminary Examination, apply to the Graduate School for **Admission to Candidacy**. A revised Program of Study must be submitted if there are any changes to the original program of study submitted in Step 4 above.

Now, you have attained the so-called *All But Dissertation (ABD)* stage.

7. **Research Progress Form:** Continue to file the Research Progress Form by April 15th EACH year until graduation (see above for description).
8. **Final Dissertation Defense:** Successfully pass the Ph.D. dissertation defense AFTER AT LEAST TWO semesters and within FOUR years of passing the Preliminary exam.
9. **Graduate School Forms:** Follow all the Graduate School requirements for applying for the Ph.D. degree:
  - (a) Nomination of Members for the Final Doctoral Examination Committee (At Least SIX Months Prior to Final PhD examination)

- (b) Announcement of Ph.D. Dissertation Defense (TEN WORKING DAYS Prior to Ph.D. Defense Date)
- (c) Certification of Completion of Doctoral Dissertation
- (d) Application for Diploma

**Important note:** If the above deadlines are not strictly met, you risk delaying your defense dates.

10. **Failing the Comps:** If a student fails to pass the comprehensive exams in the maximum allowed attempts:
- (a) Appeal to the Graduate Committee (See Appeals Process for details) for continuing in the Ph.D. program.
  - (b) Apply for a Terminal M.S. degree providing you meet all the degree requirements.  
Note: If you already have an M.S degree in Computer Science or related field, then you may not be approved to apply for a M.S. in Computer Science again.
  - (c) Leave the program without any degree.

## 2 COURSE REQUIREMENTS FOR CMSC Ph.D. STUDENTS

Out of the 33 graduate-level course credits required for the Ph.D. degree:

- (a) *Breadth Course Requirements:* You are required to take CMSC 611 (Computer Architecture), CMSC 621 (Advanced Operating Systems), CMSC 641 (Design and Analysis of Algorithms) and at least one additional course from the following list: CMSC 635 (Advanced Computer Graphics), CMSC 651 (Automata Theory and Formal Languages), CMSC 655 (Numerical Computation), CMSC 661 (Principles of Database Systems), CMSC 671 (Principles of Artificial Intelligence), or CMSC 681 (Advanced Computer Networks).
- (b) AT MOST 6 credits of CMSC 699 (P/F) and/or CMSC 800 (P/F).
- (c) No regular graduate course taken P/F will be counted towards the 33 credits.
- (d) CMSC 899 credits cannot be counted towards the 33 credits. Students may register for CMSC 899 only after passing the Comprehensive Exam.  
A minimum of 12 credits of CMSC 899 are required for graduation.
- (e) Requests for obtaining course-equivalency approvals from other universities should be submitted BEFORE submitting the Ph.D. program of study.
- (f) Requests for approval of non-CMSC course credits (AT MOST 6 credits) should be submitted by the end of SIXTH WEEK of the SEMESTER in which the non-CMSC course is taken. There is a form available for this request and should be signed by the student's research advisor.

- (g) Students are required to maintain a minimum of 3.0 GPA (This is also a Graduate School requirement). Students who fail to maintain the minimum GPA may be subject to academic probation and in the case of repeated poor academic performance, be subject to dismissal from the Graduate Program.

In addition, students are expected to obtain grades of B or better in the four breadth courses listed above in Item (a).

### **3 CMSC Appeals Process for students failing Comp. Exam**

A student who has not passed the comp exams by the specified deadline and the maximum allowed attempts, and who wishes to appeal the decision, may do so by filing a petition with the Graduate Committee within two (2) weeks after being notified of the exam results.

The purpose of the comprehensive exam is to ensure that students graduating with a Ph.D. from UMBC's CMSC program have both breadth and depth in their knowledge of computer science. If a student has not demonstrated the breadth and depth of knowledge by successfully passing the comp exam in the specified maximum number of attempts, but still wishes to stay in the Ph.D. program, they are expected to provide evidence in support of their knowledge of computer science in general, and their ability to perform high-quality research in a specific focused area. Furthermore, they must demonstrate that they are making adequate progress towards the degree and that they have support from the faculty to continue their doctoral studies.

The appeal petition should consist of the following materials:

1. A letter from the student requesting that they be allowed to continue in the Ph.D. program.
2. A copy of the student's graduate coursework academic transcript (including graduate courses taken at other institutions).
3. A copy of the Comp. exam results for each of the attempts to date.
4. A research statement describing the student's research projects and current research directions.
5. A CV listing education, work experience, and publications.
6. Letters of support from the research advisor and at least two additional faculty members.  
These letters should describe the student's progress towards the Ph.D. and should express strong support of the student's ability to successfully complete a Ph.D. at UMBC.
7. Any other materials the student or advisor wish to provide as evidence of the student's research abilities (e.g., a draft of the Ph.D. research proposal, a master's thesis, a project report, published papers).

The submitted materials will be evaluated by the Graduate Committee in making its recommendation at an evaluation meeting. This meeting is open to all graduate faculty in the Department.

*Those who can vote include: (i) all tenured/tenure-track CSEE faculty attending the Appeals Meeting, including the student's advisor; and (ii) other attending regular graduate faculty who are serving as Chairs of Dept. of CSEE Ph.D. theses (or have done so in the previous 2 years). For other graduate faculty not belonging to these categories, the final decision regarding their eligibility to vote rests with the Department Chair.*

At the beginning of the meeting, the advisor will be invited to present the student's case to the committee, and will be able to address any questions and concerns that are raised. Following this presentation, the chair will ask that the advisor leave the room for a closed discussion, at which any sensitive issues may be raised. Upon the advisor's return, the chair will summarize any points that were raised that may affect the outcome of the committee's decision. At this point, the committee will develop and vote on a recommended course of action. The recommendation must be agreed upon by majority vote.

Based on the faculty vote, the appeals process will result in one of three recommendations:

**Continuation:** That the student be considered to have passed the comps with no further action required, thereby allowing the student to continue in the Ph.D. program.

**Probational Continuation:** That the student be placed on probationary status and required to fulfill specified requirements by specified deadlines in order to continue in the program. These requirements may include, but are not limited to:

1. Retaking one or more Comp. exams with a minimum specified grade.
2. Retaking one or more Comp. classes with a minimum specified grade.
3. Completing a supervised project on a specified topic.
4. Submitting a high-quality paper on the student's research within a specified time frame.
5. Passing the preliminary exam within a specified time frame.

**Dismissal:** That the student be dismissed from the program. No subsequent appeals to the Department will be allowed.

If the Committee determines that the submitted materials demonstrate that the student possesses the necessary basic knowledge and research ability, despite the comp exam results, the committee may recommend option one (continuation).

If the submitted materials generally support the student's case, but deficiencies exist, then the committee will recommend option two (probation); the recommendation will give specific conditions and deadlines for how these deficiencies must be made up.

If the Graduate Committee determines that evidence of knowledge and research ability are insufficient, option three (dismissal) will be recommended.

The Graduate Committee's decision, once signed by the Graduate Program Director, is final and not subject to further appeal. In the case of a recommendation of probation, by the end of the probationary period, the student must submit a letter stating how the conditions have been met, along with supporting evidence. At this time, if the committee determines that the student has failed to meet any of the specified conditions according to the timeline set out in the recommendation, the student will be dismissed from the program without further appeal.