CMIX Graduate Degree Requirements for the MS and PhD in Computer Science and Computer Engineering

Graduate Committee

March 29, 2018

1   School Information

The School of Computing and Informatics at the University of Louisiana at Lafayette offers a Master's of Science (MS) degree and a Doctor of Philosophy (PhD) degree in both Computer Science and Computer Engineering.

Many people will be important to a graduate student's career, but two people are of immediate interest. Nancy Franks (nll8550@louisiana.edu) is Graduate Administrative Assistant. She sits in Oliver 307 and can be reached at (337) 482-6338. If you have an administrative question and are unsure whom to ask, try Nancy.

A Graduate Committee is charged with drafting policies and reviewing admission/graduation applications, among other duties. Dr. Anthony Maida (maida@louisiana.edu) is the Graduate Coordinator of this committee.

2   Requirements for All Degrees

A searchable catalog of classes offered is available at: `http://catalog.louisiana.edu`. Click under course descriptions. Classes offered for the upcoming semester are available in the student's ulink account.

The requirements for the graduate programs offered by the Center are outlined in the sections that follow. A course requirement can be satisfied by completing it at UL Lafayette, transferring it from another university or having the course waived. Certain restrictions are placed on whether particular courses (that have been satisfactorily completed) may be applied towards a degree.

The following rules apply to all graduate degrees.

1. Academic dishonesty and plagiarism are not allowed and will result in severe penalties to students caught engaging in such activity. The penalty can range from a minimum of 0 credit for that portion of the course to a grade of "F" for the course. For definitions of the terms *academic dishonesty* and *plagiarism*, consult the online catalog at the address listed at the beginning of this section.

2. A minimum grade of B must be earned in all courses waived, transferred, required, or applied towards a degree.

3. A minimum GPA of 3.0 must be maintained during all semesters at UL Lafayette, including semesters when prerequisites are taken.

4. Transfer courses must be approved by the Graduate Coordinator and by the Graduate School. The Graduate School requires that all transfer credits be earned in residence as a graduate student in an accredited American institution which regularly grants the Master's or PhD degree. A signature in support of the transfer from an appropriate CACS faculty member must accompany the student's petition.

5. Courses taken in other departments (at UL Lafayette) should be pre-approved by the Graduate Coordinator or Unit Head to be counted towards a degree.

6. Per graduate school requirements, at most two courses with the number designation 587 or 598 may be counted towards the degree whether it the course is from within the department or outside of the department.

7. Waived courses must be approved in writing by the appropriate faculty member. Waived courses may satisfy requirements, but their hours are not applied towards a graduate degree.

8. Courses taken by a student while an undergraduate cannot be applied towards a graduate degree. Such courses may be waived or repeated (e.g., to improve the grade), but they never apply towards the hour requirements of any graduate degree.

9. Thesis and dissertation defense exams may be conducted during the fall, spring or summer semesters.

10. Students must enroll in Graduate Seminar (CSCE 595) during each regular semester until credit has been earned for the course three times for MS students and five times for PhD students. The credits earned in CSCE 595 are not applied towards any graduate degree.

University regulations, as recorded in the UL Lafayette Graduate Bulletin, also apply. A student is subject to the requirements in effect at the time of first registration in a particular graduate program. A student may petition the CACS Appeals Committee for an exception to any of these regulations.

2.1 PhD Degree Requirements

The following requirements apply to the PhD in both computer science and computer engineering:

1. At least 9 hours of CSCE 6x9 research courses are required.

2. At most 9 hours of graduate work outside of computer science may be applied to the PhD. All such outside courses must be approved in writing by the Graduate Coordinator or the student's dissertation advisor.

3. The remaining courses must be chosen from CSCE 500/600 level courses. (If prerequisites at the 400G level are required, they are considered for the record as applying to the PhD, but hours required for the degree are increased for each 400G course taken, so that the number of courses required at the 500/600 level remains unchanged.)

4. The student should apply for PhD candidacy after: (1) fulfilling the Breadth Requirement, and (2) passing a written comprehensive exam. The Breadth Requirement is satisfied by completing six 500-level courses in CACS with GPA of at least 3.5. (For complete details, see the PhD Comprehensive instructions. The written comprehensive exam is given during the regular registration period of the fall and spring semesters each year, and two areas must be passed, in a maximum of two attempts, in three consecutive offerings. The syllabus, which is updated during each September, must be consulted for up-to-date regulations. The syllabus and past exams are available from the CACS office.

5. The oral PhD prospectus exam must be passed in a maximum of two attempts. The Dissertation Committee will consist of a minimum of 3 members; of these, at least half must be regular CMIX faculty members. The prospectus exam is conducted by the student's Dissertation Committee, plus one additional examiner from the graduate faculty of the Center chosen in consultation with the student and the Dissertation Committee chairperson. The student must prepare a written prospectus describing the current state of the art and the proposed research. The prospectus exam can be scheduled when the written prospectus has been approved by the Dissertation Committee.

6. The oral PhD Dissertation Defense must be passed in a maximum of two attempts. The oral PhD Dissertation Defense cannot be held until the student has at least two accepted publications at peer-reviewed forums. Appropriate forums include national and international conferences as well as journals.

7. The exams must be completed in sequence: (1) PhD comprehensive exam; (2) PhD prospectus exam; and (3) PhD dissertation defense.

8. Exactly 24 hours of CSCE 699 (dissertation credit) must be applied towards the degree.

9. At least 72 semester hours of graduate credit must be applied towards the degree, which includes the 24 hours of CSCE 699.

10. All degree requirements must be completed within seven years of enrolling in the first graduate-level course at CMIX.

11. At least one academic year must be completed in full-time residence at CMIX.

12. All students admitted to the doctoral program will be assigned a faculty mentor, who will advise the student on choice of courses, and monitor the student's progress until a research area and advisor is chosen.

13. Each PhD student will undergo an annual performance review.

14. Each PhD student must have an advisor at all times. The student may switch advisors by finding another advisor who agrees to supervise the student. The student must notify the previous advisor and get the Graduate Coordinator's approval in such a case.

2.1.1 Requirements Specific to PhDCE

1. CSCE 530 is required.

2. The Breadth Requirement is satisfied by completing, with GPA of at least 3.5: (1) two 500-level courses in hardware, (2) one 500-level course in software, (3) one 500-level course in theory, (4) one other 500-level course in areas not listed in (1)-(3), and (5) any accepted 500-level course. These courses cannot be transferred or waived. For courses accepted for parts of the Breadth Requirement, consult the PhD breadth and candidacy requirements.

3. The written comprehensive exam consists of two areas chosen from the following: (1) computer architecture, (2) operating systems, (3) algorithms and theory of computation, (4) knowledge and data systems, (5) programming languages and compilers, (6) artificial intelligence, (7) software engineering, (8) computer design and implementation and VLSI, (9) computer communications and networks (10) computer graphics, with at least one in areas (1), (8), or (9).

2.1.2 Requirements Specific to PhD in CS

1. CSCE 500 is required.

2. The Breadth Requirement is satisfied by completing, with GPA of at least 3.5: (1) one 500-level course in hardware, (2) two 500-level courses in software, (3) one 500-level course in theory, (4) one other 500-level course in areas not listed (1)-(3), and (5) any accepted 500-level course. These courses cannot be transferred or waived. For courses accepted for parts of the Breadth Requirement, consult the PhD breadth and candidacy requirements.

3. The written comprehensive exam consists of two areas chosen from the following: (1) computer architecture, (2) operating systems, (3) algorithms and theory of computation, (4) knowledge and data systems, (5) programming languages and compilers, (6) artificial intelligence, (7) software engineering, (8) computer design and implementation and VLSI, (9) computer communications and networks, (10) computer graphics, with at least one in areas (2), (3), (4), (5), (6), or (7), (9), or (10).

2.2 MS Degree Requirements

The following regulations apply to the MS in both computer science and computer engineering.

1. At least 33 hours for the non-thesis option and 30 hours for the thesis option of CSCE graduate credit must be applied towards the degree.

2. At most 6 hours of (a) transfer credit from another university, or (b) courses at UL Lafayette outside of CACS, may be applied to the degree. Certain courses from other departments of UL Lafayette are preapproved. (A list is available from the Graduate Coordinator.) All others require written approval of the Graduate Coordinator. (Note that these hours do not satisfy requirement 4 below.)

3. At most 6 hours (for the non-thesis option) and 9 hours (for the thesis option) of CSCE 6x9 research courses may be applied towards the degree.

4. At least 18 hours for the thesis option and 21 hours for the non-thesis option of CSCE 500/600 level lecture courses (excluding CSCE 590, 599 and 6x9) must be applied towards the degree. (Two CSCE 598s may be applied to this requirement.)

5. All degree requirements must be completed within five years of enrolling in the first graduate-level course at the Center.

6. Students admitted to the PhD program may satisfy these requirements and apply for and receive the MS degree on the way to the PhD. Except for CMPS 400-level classes, CSCE 590 and 599, courses applied to the MS may also be applied to the PhD if otherwise acceptable.

7. Students seeking a second Master's degree from UL Lafayette should carefully consult applicable Graduate School regulations. No more than nine hours credit for one Master's degree may be applied to another.

8. For the thesis option, the rules for the thesis committee and oral defense are the same as for a PhD dissertation, except for the requirement on publications.

2.2.1 MSCE Degree Requirements

1. CMPS 455G, CSCE 530, and either CSCE 583 or 585 are required.

2. For the thesis option, exactly 6 hours of CSCE 599 must be applied towards the degree. For the non-thesis option, exactly 6 hours of CSCE 590 must be applied towards the degree.

2.2.2 MSCS Degree Requirements

1. CSCE 500 is required.

2. CMPS 430G, 450G, 455G, and 460G are required. This requirement may be satisfied by having passed the course in question as a UL Lafayette undergraduate with a grade of B or better, or by similar performance in a graduate or undergraduate course at another institution, approved in writing by a CACS faculty member designated for the course. If the same faculty member so advises, this requirement may also be satisfied by completion of CMPS 530, 550, 555 and 561, 562, or 566 in place of 430, 450, 455, and 460, respectively. At most 6 hours of graduate credit earned for CMPS 430G, 450G, 455G, and 460G may be applied towards the degree.

3. For the thesis option, exactly 6 hours of CSCE 599 must be applied towards the degree. For the non-thesis option, 3 hours of CSCE 590 may be applied to the degree. For students supported on CACS assistantship or fellowship for more than one semester, 599 or 590 is required.