# Guidebook for Computer Science Graduate Students Computer Science Department University of Kentucky

### November 7, 2025

Welcome to Lexington and to the University of Kentucky Computer Science Department! The purpose of this guidebook is to present a lot of different information under one cover. The guidebook contains the rules and regulations concerning graduate students, the director of graduate studies, and the graduate school. This guidebook is likely to be updated periodically.

This guidebook addresses matters pertaining to programs of study leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Computer Science (CS). The Department of Computer Science also offers the MS and PhD degrees in Computer Engineering and the MS degree in Data Science. Information on those other programs is not covered by this document.

We believe this document to be accurate, but the official documents of Graduate School and University of Kentucky take precedence in all matters of disagreement. The Graduate School Bulletin https://catalogs.uky.edu/index.php is the most comprehensive document describing graduate studies at UK.

# Guidelines for graduate students in CS

General regulations are available at https://catalogs.uky.edu/content.php?catoid=15&navoid=842. This link covers all the following topics and more:

- Student Responsibility
- Graduate Courses
- Add/Drop and Withdrawal
- Academic Load
- Grades and Grade Point Average
- Repeat Option
- Transfer of Credits
- Scholastic Probation
- Termination
- Assessment of Doctoral Student Progress
- Examinations for Graduate Credit
- Students Changing Programs

- Independent Study Programs (Correspondence Courses)
- Graduation (Commencement)

# **Abbreviations**

This document uses the following abbreviations:

ASST: Administrative Assistant for Payroll

CSC: Graduate School code for graduate programs in CS used as a designation of

graduate faculty membership

CS: Computer Science Department DGS: Director of Graduate Studies

DUS: Director of Undergraduate Studies

GS: Graduate School UKIC: International Center

QE: University Qualifying Exam (PhD)

RA: Research Assistant (from a faculty grant)

TA: Teaching Assistant UK: University of Kentucky

#### I. ADMISSION

- A. Admission procedure General information about admission is available at https://catalogs.uky.edu/content.php?catoid=15&navoid=841#admission-procedures. Additional department-specific information can be found at https://engr.uky.edu/academics/departments/cs/students/graduate-studies/computer-science/admissions
- B. Accelerated Master's Pathways. The University of Kentucky's Accelerated Master's Pathways (AMP) gives highly motivated students the opportunity to earn both a bachelor's degree and a master's degree in five years, instead of six. More information and an application form at https://gradschool.uky.edu/accelerated-masters-pathways-amp.
- C. Graduating Seniors as Part-Time Graduate Students. Seniors at the University of Kentucky lacking no more than 6 credit hours for graduation and having an undergraduate average of at least 2.75 on all work attempted may register in the Graduate School in conditional status. More information is available at https://engr.uky.edu/admissions/graduate-admissions/graduating-seniors-part-time-graduate-students.
- D. **Students Changing Programs.** Students who plan to change programs must submit a new application (and fee) to the Graduate School and be formally admitted by the Director of Graduate Studies in the new program.
- E. Leave of Absence Re-admission. and Information regarding of leave available sence and re-admission is at https://gradschool.uky.edu/ registration-holds-important-dates-leave-absence.

### II. MASTERS DEGREE REQUIREMENTS

A. **Core Courses.** MS candidates must pass four *core* courses, two from each of the following two groups: **(a)** CS 505 (Databases), CS 541 (Compilers), CS 570 (Systems), CS 571 (Networks), and **(b)** CS 515 (Algorithms), CS 537 (Numerical), CS 575 (Theory). The final grades in each course must be **B** or

- higher. In exceptional cases, when courses needed to complete the requirement are not offered, the DGS may approve other courses as equivalent replacements.
- B. Degree Requirements. The requirements are available at https://catalogs.uky.edu/content. php?catoid=15&navoid=843#thesis-non-thesis-option. Note that CS4XXG classes do not count for credit.
- C. **Enrollment.** Students need not be enrolled in the semester they take the masters exam and/or receive a Masters degree. This rule applies to Plan A students as well as Plan B students. It is not necessary to take a full load during the last semester of courses, even for international students and/or TAs. Students with visas need to check with their international advisor to ensure their status is not affected by the reduced load and submit the proper documentation.

# D. CS 610 and Masters Project.

- (a) CS 610 is not a required course.
- (b) The grade in CS 610 (for students taking the course) will reflect student's performance during the whole semester. Specifically, the grade will depend on: (a) initial write-up, (b) midterm progress report, (c) final project. It will not depend on the final examination.
- (c) Each MS project (regardless of whether it is performed as CS 610) should require the amount of work that is approximately equal to taking a 600-level course. It should require a programming component, testing/verification as well as a final write-up and presentation. Moreover, at the beginning of the project, a student should prepare a write-up of the project that would provide, in particular, the techniques to be used and specific goals with a time table. This write up should be submitted to the advisor and posted on the Web. The student should also provide the advisor with a written progress report in the middle of the semester.
- E. Final examination. Information regarding final examination and committee formation is available here https://catalogs.uky.edu/content.php?catoid=15&navoid=843#final-examination.
- F. Written report. A written report is required for completion of a Masters Degree (whether thesis or project). The writeup must be of sufficient quality to enable committee members to determine the general nature, scope, and quality of the project, and must be provided (in hard copy, if requested) to each committee member at least ten (10) calendar days before the scheduled examination date.
  - In the event that some committee member does not receive the writeup at least 10 calendar days before the scheduled examination, the faculty member shall report this fact to the DGS, who shall inform all members of the committee and the student that the defense is being rescheduled.
- G. Time limits. Information regarding time limits is available at https://catalogs.uky.edu/content.php?catoid=15&navoid=843# time-limit-for-masters-specialists-degrees.

# III. PhD DEGREE REQUIREMENTS

- A. Advisor amd PhD advisory committee. Information regarding the selection of an advisor as well as of the PhD advisory committee is available at https://catalogs.uky.edu/content.php?catoid=15&navoid=844#the-major-professor-and-the-advisory-committee. Full graduate faculty members for CSC (but not with CS as their home department) can serve as co-chairs, with a regular CS department member as another co-chair. Upon request, the CS Department may allow such faculty to serve as sole chair of the committee. For the purpose of the committee formation, faculty with joint appointments in CS cannot serve in the role of a member from an outside department.
- B. **Plan of study.** The advisory committee shall oversee the student's progress towards the degree. To this end, students will regularly and at least once a year appraise all committee members with the state of their coursework and research. The committee also decides on the form of the depth requirement completion process and the QE.
- C. Residence credit for a PhD. Information is available at https://catalogs.uky.edu/content.php?catoid=15&navoid=844#residency-requirements. CS MS students who transfer to the PhD program before earning the MS degree may count all their UK graduate credits earned towards the MS degree (except CS 768 and similar) towards the first and second year of residency. The DGS may ask the GS to waive the second year of residency for exceptional students.
- D. **Breadth requirement** Students fulfill the breadth requirement by taking four courses in the following list, and at least a course from each group. Only one class among CS541 and CS655 can count towards group A, and similarly only one class among CS572 and CS564 can count towards group B. Students must receive at least a B in all classes, and an A in at least two of them.
  - (a) Group A: CS515 (Algorithms), CS575 (Models of Computation), CS541 (Compilers) / CS655 (Programming Languages).
  - (b) Group B: CS570 (Operating Systems), CS571 (Networking), CS572 (Network Security) / CS564 (Computer Security), CS505 (Databases).
  - (c) Group C: CS616: (Software Engineering), CS663: (Artificial Intelligence), CS509 (Ethics), CS535 (Comp. Graphics).

A student who has taken equivalent courses elsewhere can ask for them to apply to the breadth requirement; each such case is evaluated on its merits by the DGS.

- In exceptional cases, when courses needed to complete the requirement are not offered, the DGS may approve other courses as equivalent replacements.
- E. **Depth requirement.** The Depth process is individualized to the research focus of the student. The student's committee decides on the appropriate form of this process. It can be a written exam, an oral exam, a literature review, a published paper, some other requirement, or a combination of these. The student's committee informs the DGS when the student has accomplished this process.
- F. Qualifying exam (QE). Information about the QE is available at https://catalogs.uky.edu/content.php?catoid=15&navoid=844#the-qualifying-examination.
  - **CS 757: Qualifying Examination Residency Credit** 757 is not a required course. Students must have completed all qualifying examination coursework requirements to be eligible to enroll in 757. Students will register for 2 credit hours of 757 and this will be recognized as full-time enrollment.
    - This course will be graded S/UN and will NOT be repeatable.
    - If the QE is not taken an I grade should be assigned.
    - If the QE is not passed a UN grade should be assigned. Enrollment in up to 9 credit hours of alternative coursework will be required in subsequent semester(s) until the QE is passed. At that point an S grade may be assigned to 757 to resolve an I grade; a UN grade will however stand.

• Students will not be able to register for 767 until the QE is passed.

After the QE, students must enroll in CS 767 *Dissertation Residency Credit*, a 2-credit hour course, every Fall and Spring semester (at least 2) until completing the degree.

In addition, students may enroll for any other course approved by their advisory committee. However, this requires a permission from the Graduate School. They will be charged at the in-state tuition rate plus mandatory fees in each term (Spring and Fall).

- G. Time limits. Information regarding time limits is available here https://catalogs.uky.edu/content.php?catoid=15&navoid=844#time-limit-for-doctoral-degrees.
- H. **Assessment of progress.** The DGS sends students every year a form to assess their progress. A student should provide a detailed description of their progress. The advisor also should provide an assessment in the respective section. The form, once completed, should be sent back to the DGS. The DGS provides a feedback of the progress. Students determined by the DGS as borderline or not making a satisfactory progress towards the degree are discussed at the faculty meeting.
- I. PhD final examination. Information regarding the final examination is available here https://catalogs.uky.edu/content.php?catoid=15&navoid=844#the-final-examination.

#### IV. COURSES

- A. **Advising.** Prior to registration or pre-registration, students are encouraged to discuss their schedule for next semester with the DGS or their advisor.
- B. **CS 612, independent work.** This course may be repeated to a maximum of 9 credits by PhD students and 6 credits by MS students (exceptions to the 6 credits limit for MS students require the prior approval of the DGS). Students taking the course must work according to a syllabus developed by the faculty member and approved by the DGS. The syllabus must specify the topic, reading lists, meetings schedule and deliverables and describe the grading schema that will be used. Enrollments in CS 612 is possible only after the DGS approves the syllabus.
- C. **Full-time status.** International students and all funded TAs and RAs must maintain the full time student status. In most cases, this is accomplished by taking 9 credits of the course work or by 2 credits of CS 757, CS 767 (for PhD student) and CS 748 (for MS students in option A).
- D. Curricular practical training (CPT).

Students considering CPT must contact the the UKIC (https://international.uky.edu/) and the DGS before making any plans.

E. Optional practical training (OPT). UKIC (https://international.uky.edu/) provides accurate and up-to-date details about the program.

### V. FAILING OFFICIAL EXAMINATIONS

Information regarding failing final examinations is available here https://catalogs.uky.edu/content.php?catoid=15&navoid=843#final-examination for MS students, and here https://catalogs.uky.edu/content.php?catoid=15&navoid=844#the-final-examination for PhD students.

### VI. PROPER BEHAVIOR

- A. **Plagiarism.** All academic work, written or otherwise, that a student submits is expected to be the result of that student's own thought, research, or self-expression. It is a serious offense to allow other students to copy work or to copy the work of other students (even if it is in a public computer file) unless the instructor of the course explicitly permits such activities. A student who borrows ideas, wording, or code from other sources must acknowledge that fact or the student has committed plagiarism. These offenses are punished quite strictly. University of Kentucky adopted and follows detailed policies concerning plagiarism and academic offenses. Detailed information on these and related topics is at https://www.uky.edu/ombud/.
- B. Responsible use of computers. Students are expected to follow these rules: Respect the privacy of others. Don't try to gain access to the files of another user without clear authorization (such as public access permission). Don't try to intercept network communications (including mail). Don't build programs that secretly collect information about their users. Don't attempt to obtain unauthorized privileges. Don't try to alter the integrity of the software (by using unauthorized accounts, impersonating others, cracking passwords, modifying others' data or programs). Don't copy programs for redistribution outside the department (even if within UK) without authorization. Don't use our computers for immediate financial gain. Inform the staff if you detect others violating these principles.
- C. **Computer privacy.** The staff and faculty will generally not attempt to read protected or encrypted files and directories unless the owner explicitly permits it, except if they need to in order to perform their function or if there is reasonable suspicion of someone violating the plagiarism or responsible computer use guidelines. The Department keeps archival backups on a regular basis. Mail and protected (or even encrypted) files and directories are not secure. Therefore, it is unwise to keep confidential material on the computer. More detailed information concerning the general UK computing infrastructure can be found at https://its.uky.edu/.

# VIII. INTERNATIONAL STUDENTS

As the regulations change frequently, the only definitive source of information on these matters is the UKIC https://international.uky.edu.

# IX. FINANCIAL MATTERS

- A. **Travel support.** The department has a limited budget to support travel expenses of students presenting talks at conferences or expenses related to thesis/dissertation research. To apply for support, students must contact the DGS by email.
- B. Payroll. The payroll for Computer Science TAs and RAs is handled by the ASST. The ASST can provide forms to let students decide how much state and federal withholding should be applied. Students may be eligible for a waiver of local taxes; see the ASST for details.
- C. Fellowships. The GS offers fellowships for graduate students. The details are at https://gradschool.uky.edu/fellowships.
- D. **TA positions** are generally allocated by the DGS in consultation with the Department Chair. Summer TAs are allocated by the DUS. The DUS assigns responsibilities to TAs. The CS Department expects full load for TAs in Fall and Spring semesters. In exceptional cases, the GS may waives this requirement, if requested by the DGS with a strong compelling justification.

- E. **RA positions** are offered by faculty members, both in CS and in other departments, who have funding from external sources. The CS Department expects full load for RAs in Fall and Spring semesters. Exceptions are possible but require a prior approval from the DGS.
- F. **Limits.** CS policy is to support a masters student with a TA position only for two years. PhD students with fewer than 8 semesters as a TA get priority for reappointment over students with 8 or more semesters. PhD students with 8 or more semesters as a TA who have not passed the QE have the lowest priority.
- G. **Tuition scholarship.** Full-time TAs and RAs get a full tuition scholarship; Half-time TAs and half-RAs get a half tuition scholarship.