

Requirements and Guidelines Master of Science Degree in Computer Science

EFFECTIVE FOR ENTRY TERM FALL SEMESTER 2016 -or- LATER.

This document, along with the Program of Study form, supersedes any other written documentation (including DARS).

I. Minimum Entrance Requirements

Admission to the M.S. Program in EECS is subject to final approval by the EECS Graduate Committee. The following are minimum requirements that are used by the EECS Graduate Committee in evaluating applications. Students meeting these guidelines will be selected on a competitive basis.

- a) Minimum Qualifications to Apply for Unconditional Admission:
 - 1. Bachelor of Science or Bachelor of Arts degree in Computer Science, Computer Engineering, or a closely related discipline.
 - 2. Undergraduate GPA of 3.0/4.0 or equivalent.
- b) Applicants for admission from non-accredited programs, or with an undergraduate GPA below 3.0, or with degrees in a related area, will be carefully considered for admission by the EECS Graduate Committee. Remedial work for such applicants may be required.

II. Requisites

The following, or their 3000-level equivalents, are requisites for admission to the program. Students without credit in these courses or their equivalents should be prepared to obtain credit in all four (4) before continuing in the program.

CS 5000D	Introduction to Discrete Structures
CS 5200D	Organization of Programming Languages
CS 5420	Operating Systems I
CS 5610D	Data Structures

III. Degree Requirements

a) Foundation requirement

All students must take the following two (2) courses:

CS 5060	Computation Theory
CS 6040	Advanced Algorithms

These two courses provide the foundation for graduate level work in computer science. Students must obtain a grade of B or better in these courses.

Ohio University graduates who have credit for the 4000-level versions of the first course above may use this course to satisfy the foundation requirement provided the grade received was B or better. If the foundation course is not taken for this reason, another graduate-level CS course at the same or higher level must be taken to replace it.

b) Depth requirement

All students must take additional courses (see the latest version of Approved Courses for the MSCS Depth Requirement on the EECS website) in order to develop a depth of knowledge in computer science.

c) Grade point average for graduation

In order for the Master of Science degree to be awarded, a candidate must have earned a grade point average no lower than 3.0 for all formal course work taken at Ohio University.

d) Additional Grade Standards

No more than six (6) semester hours of grades at B-, C+, or C may be applied toward fulfilling degree requirements, i.e., for all course work used to fulfill the course requirements on the Program of Study. In addition, no hours below a grade of C may be applied toward fulfilling degree requirements. Nine (9) or more semester hours below B- will result in the removal of the student from the M.S. program.

e) Probation Status

A candidate having an overall grade point average below 3.0 will be placed on probation status.

f) Retention in Program

Should a candidate's grade point average fall below 3.0 after 15 or more hours of formal course work has been accumulated, one semester on probation status will be permitted. Failure to raise the grade point average to 3.0 or above at the end of that semester will result in the removal of the student from the program.

g) Grade Point Calculations

The grade point average is based on all applicable work on the Program of Study, excluding transfer credits.

h) Academic Requirements

The following are specific course, thesis, and project requirements for both thesis and project options.

Plan A (Thesis Option)

1. At least 30 semester hours of courses for graduate credit with a cumulative grade point average of 3.0 or better are required, including:
 - a) No more than 8 hours of graduate credit transferred from another institution.
 - b) At least 18 hours of formal graduate course work exclusive of Thesis (CS 6950), Graduate Research Seminar (EE 6981) and Technical Writing Seminar (ET 6020).
 - c) Satisfactory completion of the foundation requirement III (a).
 - d) Satisfactory completion of the depth requirement III (b). Students must take 4 courses from an approved list (see the latest version of Approved Courses for the MSCS Depth Requirement on the EECS website) with all courses at the 6000-level.

- e) No more than 3 credit hours of Independent Study or other informal coursework will count toward degree requirements. Ohio University graduates who have taken the 4000-level version of a foundation course may increase the Independent Study limit to 6 hours.
 - f) A passing grade in two (2) semesters of EE 6981 Graduate Research Seminar. Students should register for one (1) hour each of the two (2) semesters. EE 6981 is offered on a Pass/Fail basis. All students are required to present his/her thesis research work once in the seminar. Before presenting, the student must have his/her major advisor inform the seminar instructor that the student's research is mature enough for presentation.
 - g) A passing grade in one (1) semester of ET 6020 Technical Writing Seminar.
 - h) A satisfactory thesis (9 hours of CS 6950). The thesis represents a piece of sound work in computer science presented in a scholarly manner, and reviewed and approved by all members of the student's committee. It may be theoretical, practical, or a combination.
2. Satisfactory performance on a final oral examination with emphasis on the thesis investigation.

Plan B (Project Option)

1. This non-thesis option requires more coursework than the thesis option, but instead of a traditional M.S. thesis, a shorter scientific project report must be completed and approved by the student's committee.

At least 30 semester hours of courses for graduate credit with a cumulative GPA of 3.0 or better are required, including:

- a) No more than 8 hours of graduate credit transferred from another institution.
- b) At least 24 hours of formal graduate course work exclusive of Thesis (CS 6950), Graduate Research Seminar (EE 6981) and Technical Writing Seminar (ET 6020).
- c) Satisfactory completion of the foundation requirement III (a).
- d) Satisfactory completion of the depth requirement III (b). Students must take 6 courses from an approved list (see the latest version of Approved Courses for the MSCS Depth Requirement on the EECS website) with at least 4 courses at the 6000-level.
- e) No more than 3 credit hours of Independent Study or other informal coursework will count toward degree requirements. Ohio University graduates who have taken the 4000-level version of a foundation course may increase the Independent Study limit to 6 hours.
- f) A passing grade in two (2) semesters of EE 6981 Graduate Research Seminar. Students should register for one (1) hour each of the two (2) semesters. EE 6981 is offered on a Pass/Fail basis. All students are required to present his/her project work once in the seminar. Before presenting, the student must have his/her project advisor inform the seminar instructor that the student's project is mature enough for presentation.
- g) A passing grade in one (1) semester of ET 6020 Technical Writing Seminar.

- h) A satisfactory project report (3 hours of EE 6943). The report represents a piece of sound work in computer science written in a scholarly manner, and reviewed and approved by all members of the student's committee. It may be theoretical, practical, or a combination. If any committee member(s), after reviewing the report, requests the student to make an oral presentation, the student will be required to make a brief presentation (no longer than 30 minutes). The committee will examine the presentation and can conduct a final oral examination with emphasis on the project (the examination may also cover general computer science topics).

IV. Committee and Advisor

- a) Upon entering the program, the Chair of the EECS Graduate Committee can act as the student's temporary advisor until a major advisor has been obtained. In most cases, the Chair will not assist the student with course selection; rather, he or she will direct the student to an EECS faculty member with similar research interests for advice on course selection. The student should understand that giving such advice does not mean that the faculty member has agreed to serve as the student's major advisor. This faculty member will aid the student in course selection for no more than two semesters.
- b) The major advisor is a faculty member in the student's field of interest who will confer with the student and plan a Program of Study no later than the end of the sixth week of the first semester after the student has completed 9 hours of formal course work. The student is responsible for obtaining the cooperation of the major advisor, by mutual consent. The student is expected to inform the major advisor of his or her progress on a regular basis.
- c) The student's examining committee is chosen, in consultation with the major advisor, no later than the end of the sixth week of the first semester after the student has completed 9 hours of formal course work. The examining committee consists of four (4) members: major advisor, who serves as chair, two (2) other EECS faculty members, all of which must be Graduate Faculty or Associate Graduate Faculty in the School of Electrical Engineering and Computer Science, and one (1) external representative, who is recommended to and approved by the Senior Associate Dean for Research and Graduate Studies of the Russ College of Engineering and Technology. The external representative must come from a school/department outside the Russ College of Engineering and Technology.

V. Program of Study

- a) Immediately after (or during) the selection of the student's examining committee, the student must plan a Program of Study in consultation with the major advisor. The Program of Study is recorded on a form provided on the EECS website. After completing the form, the student must obtain the signatures of the major advisor and all examining committee members. The completed form is then submitted to the EECS Graduate Programs Office for final approval by the EECS Graduate Committee Chair.
- b) **The Program of Study must be submitted by the end of the sixth week of the first semester following the student's completion of 9 hours of formal course work.**
- c) Changes to the Program of Study may be made by obtaining the appropriate form from the EECS website. Signatures of the major advisor and all examining committee members must be obtained. The completed form is then submitted to the EECS Graduate Programs Office for final approval by the EECS Graduate Committee Chair.
- d) No changes in the Program of Study will be approved for the addition or deletion of a course for which a grade has already been received.

VI. Transfer of Credit

A maximum of 8 semester hours, or the equivalent, may be transferred from an accredited university and applied toward a student's M.S. degree providing:

- a) The credits are designated at the transferring institution as graduate level only.
- b) The credits were obtained by taking formal coursework within the past five years.
- c) Grades earned on all transfer credits are B or better.

VII. Time Limit

Students must complete all degree requirements within six (6) calendar years from the date of admission to the M.S. program. This is an Ohio University requirement.