ECE Graduate Student Guide

This guide outlines additional policies and procedures regulating ECE graduate programs, supplementing the requirements defined by:
(a) the UAH School of Graduate Studies, available at catalog.uah.edu, and
(b) ECE program-specific pages, available at:
https://www.uah.edu/eng/departments/ece/programs/graduate.

Both students and advisors are responsible for ensuring that these guidelines are followed.

ECE Graduate Programs and Coordinators (As of Fall 2024)

- MSE - Master of Science in Engineering (Computer Engineering)
  Coordinator: Dr. Aleksandar Milenkovic
  Web: https://www.uah.edu/eng/departments/ece/programs/graduate/computer-engineering/masters

- MSE - Master of Science in Engineering (Electrical Engineering)
  Coordinator: Dr. Laurie Joiner
  Web: https://www.uah.edu/eng/departments/ece/programs/graduate/electrical-engineering/masters

- MSSE - Master of Science in Software Engineering
  Coordinator: Dr. David Coe
  Web: https://www.uah.edu/eng/departments/ece/programs/graduate/software-engineering

- MSCBS - Master of Science in Cybersecurity
  Coordinator: Dr. Tommy Morris

- PhD - Computer Engineering
  Coordinator: Dr. Aleksandar Milenkovic
  Web: https://www.uah.edu/eng/departments/ece/programs/graduate/computer-engineering/phd

- PhD - Electrical Engineering
  Coordinator: Dr. Laurie Joiner
  Web: https://www.uah.edu/eng/departments/ece/programs/graduate/electrical-engineering/phd

MSE/MSSE/MSCBS Degrees (Thesis or Non-Thesis Students)

1. **Advisor Assignment**
   Graduate program coordinators serve as provisional advisors. Upon admission, students should meet with the relevant coordinator to discuss their first semester coursework and begin the process of selecting a permanent advisor. A coordinator may serve as a student's permanent advisor, or the student may select another faculty member from the appropriate graduate program.

2. **Program of Study (POS)**
   Students must submit their Program of Study (POS) for approval after completing 12 credit hours of graduate coursework.

3. **Coursework Time Limit**
   The degree must be earned within 10 years or by the end of the 30th semester. There are three semesters in a year: Fall, Spring, and Summer. The time clock starts when the first course is taken (including transfer credit).

4. **Credit Requirements for MSE Degrees**
   At least 50% of graduate credit hours must be earned within the ECE Department.

5. **Credit Requirements for MSCBS and MSSE Degrees**
   The 50% ECE credit hour rule does not apply to interdisciplinary MSCBS and MSSE programs. Students in these programs must meet the program-specific credit requirements.

6. **Transfer Credits**
   With permission from the program coordinator, students may transfer up to 12 semester hours of acceptable graduate credit from an incomplete degree program earned in an approved institution and may count it toward a master's degree. No transferred credit may be more than 10 years old at the time of a student's graduation from UAH. Such credit may be transferred with the approval of the program coordinator if completed with a grade of B or better.

MSE/MSSE with Thesis (Thesis Only Students)

1. **Permanent Advisor**
   Students must select a permanent advisor within completing 12 credit hours of coursework. The advisor will provide continuous mentoring, assist in preparing the Program of Study, and help form the Supervisory Committee (SC).

2. **Supervisory Committee (SC)**
   The Supervisory Committee must include at least three graduate faculty members with majority having expertise in the student's field of study. The committee chair must be a full-time ECE faculty member, and at least half of the committee members must be full-time ECE graduate faculty.

3. **Advisor Retirement**
   In the event of an advisor's retirement, they may continue to serve as a thesis advisor, provided they remain part of the ECE graduate faculty. However, a permanent full-time faculty member must chair the Supervisory Committee.

4. **Thesis Document**
   Thesis document must be submitted to the supervisory committee at least two weeks before thesis defense.

Ph.D. Degrees

1. **Advisor Assignment**
   Graduate program coordinators serve as provisional advisors for newly admitted students. Students must meet with the program coordinator immediately upon admission to discuss their first semester coursework and to begin the process of identifying a permanent advisor. A permanent advisor must be selected by the time of the preliminary evaluation.

2. **Finding an Advisor**
   It is the student's responsibility to actively seek and secure a faculty advisor for their Ph.D. program. Although the department chair and program coordinators may provide guidance, they are not required to serve as permanent advisors unless mutually agreed upon. Students are encouraged to engage with faculty members whose academic and research interests align with their own. Students who fail to secure an advisor will not be allowed to continue in the Ph.D. program.

3. **Preliminary Evaluation**
   The preliminary evaluation assesses a student's readiness for doctoral studies and their ability to conduct independent research. It consists of a written test and an independent research component. The written test, covering three subject areas, is administered twice a year: in the fall semester (the first week after Fall Break) and in the spring semester (the last week of February). Students must achieve a satisfactory score in two out of the three subject areas.
   The independent research component involves reviewing research papers, preparing a technical report, and presenting the findings to the Preliminary Evaluation Committee. The student's advisor is responsible for forming the Preliminary Evaluation Committee of three faculty members, with approval from the program coordinator. The committee submits a report before the end of the semester in which the exam is taken. The preliminary exam must be completed within the first 21 credit hours of graduate coursework.
   Exemptions may be granted to students who have completed a Master's thesis at UAH or other ABET-accredited institutions or have demonstrated strong research capabilities, e.g., through publications in reputable venues.

4. **Program of Study (POS) Submission**
   Students must submit their Program of Study (POS) for approval after completing the preliminary evaluation.

5. **Coursework Timeframe**
   All degree requirements, including transfer credits, must be completed within 30 semesters of graduation. Courses older than 10 years cannot be validated and must be retaken.

6. **Supervisory Committee (SC)**
   The Supervisory Committee must consist of at least five graduate faculty members, including the SC chair (typically the permanent advisor). At least half of the committee members must be full-time ECE graduate faculty. For Ph.D. program in Computer Engineering, one committee member must be from The University of Alabama at Birmingham (UAB), as the program is jointly administered by UAH and UAB (shared Ph.D.).

7. **Advisor Retirement**
   In the event of an advisor's retirement, they may continue serving as a dissertation advisor, provided they remain part of the ECE graduate faculty. However, a full-time faculty member must serve as the chair of the Supervisory Committee.

8. **Qualifying Exam**
   The Qualifying Exam is administered under the auspices of The Graduate School and must be taken within one year of completing the formal coursework in the Program of Study. All classes must be valid at the time of administration. If a student does not complete their dissertation within five years, the qualifying exam must be retaken. The Qualifying Exam may only be taken twice.

   The Qualifying Exam is conducted in two stages, which may be separated by a period determined by the Supervisory Committee. However, the Qualifying Exam should be completed within a 3-month time window. The first stage consists of a written and oral examination to demonstrate proficiency in the subject matter outlined in the Program of Study. The second stage involves a dissertation proposal, where the student submits a written proposal and presents it orally to the committee. The dissertation topic and the proposed research approach must be clearly outlined to the committee's satisfaction for a passing result. A passing grade requires no more than one dissenting vote from the Supervisory Committee.

9. **Submitting 799 Course Reports**
   Students must submit a brief report on their research progress every semester in which they are enrolled in dissertation hours. The advisor should provide an evaluation of the student's report and include it in the student's file.

10. **Annual Meetings with the Supervisory Committee**
    The Supervisory Committee must meet with the Ph.D. candidate (a student who has passed the Qualifying Exam) at least once a year to review the student's progress. The committee must write a report documenting the student's progress.

11. **Dissertation Timeline**
    Students must defend their dissertation within five years of passing the Qualifying Examination (QE). If the dissertation is not defended within this timeframe, the student must retake the QE, which may only be taken twice.

12. **Dissertation Document Submission**
    Dissertation document should be submitted to the SC at least 2 weeks before the dissertation defense.

13. **Graduation Requirements**
    To graduate with a Ph.D., students must meet the following requirements:

    - Overall grade point average must be B or better on all graduate credit hours at UAH.

    - Pass the Preliminary Exam (PE).

    - Submit an approved Program of Study (POS).

    - Pass the Qualifying Examination (QE).

    - Successfully defend their doctoral dissertation.

    - Publish or have an accepted publication of at least one peer-reviewed journal or conference paper related to their research. The Supervisory Committee will determine the relevance of the publication.

14. **Dates and Timelines**
    The graduate school dates and deadlines are available at:
    https://www.uah.edu/graduate/resources/thesis-dissertation-and-dnp-project/dates-deadlines

15. **Credit Transfer**
    All credit toward the Ph.D., which has not been earned at UAH, must be acceptable graduate credit from an approved institution. Such credit may be transferred with the approval of the Supervisory Committee, if completed with a grade of B or better. A majority of the credit hours (including dissertation credits) toward a doctoral degree must have been earned at UAH.

16. **Ph.D. to MSE Option**
    Students who are unable to complete the Ph.D. program or who fail the preliminary exam may apply their earned credits toward an MSE degree.