

Computer Engineering MS Graduate Project

The flagship feature of the computer engineering MS program experience is conducting research in collaboration with our world-class faculty. The MS curriculum is flexible and tailor-made for you with a culminating thesis or project option.

Graduate project guidelines

The graduate project is a scholarly undertaking that addresses a current technical problem with tangible outcomes. Students in the project option will obtain specialized education through additional courses and conduct a professionally executed project under the supervision of a faculty advisor. The project generally addresses an immediate and practical problem, a scholarly undertaking that can have tangible outcomes. Typical projects may implement, test and evaluate a software and/or hardware system, conduct a comprehensive literature review with comparative study, etc. The students are expected to give a presentation or demonstration of the final deliverables of the project.

For successful completion of the project, it is important that the graduate student identifies a topic of interest early on. Following is a timeline recommended for project students:

- Semester 1: Graduate Seminar
- Semester 2: Thesis/Project Initiation Seminar + Focus Course(s)
- Semester 3: Project Credit(s) + Project Focus Course(s)
- Semester 4: Project Credit(s) + Project Demonstration

The following steps are also part of the graduate project:

1. **Advisor Selection:** The selection of a project advisor should be a priority for the graduate student. Students are strongly encouraged to talk with faculty, to see if there are project opportunities available in their labs. To help students identify a project and advisor, the computer engineering department offers a graduate seminar.
2. **Graduate Seminar:** The graduate seminar exposes students to different research areas that are of interest to computer engineers. It is offered in both fall and spring semesters. The seminar class meets for one hour every week. Students can identify research topics of interest from the seminar presentations and discuss them with the faculty. After students identify their topic and advisor, they are required to complete a Faculty Advisor Declaration Form to be submitted to the computer engineering department main office. Students are encouraged to continue attending seminars of interest, to stay current in the field.
3. **Project Initiation Seminar:** By the end of this seminar course, students are required to complete a project initiation document, which entails the formulation and planning for the project completion. The project proposed must be both reasonable in specification and feasible for completion within two semesters. The project advisor has to sign off the document to receive a passing grade in this course. At the end of the seminar, students are required to present their project plan approved by the advisor. Once the project has been approved, then students are required to complete the Proposal Approval Form to be submitted to the computer engineering main office.

4. **Project Focus Courses:** Students are required to take two project focus courses, for successful execution of the project. The project advisor must approve these courses.
Students are encouraged to take these courses starting in their second semester.
5. **Graduate Research Symposium:** All graduate students are required to present a poster in the computer engineering graduate research symposium, which will provide an opportunity for students to present their work in a formal setting. The poster does not need to reflect completed work; ongoing and exploratory project work is also encouraged for the presentation at the symposium. The symposium is typically held at the end of the spring semester.
6. **Project Completion Requirements**
 - Including your project advisor, a total committee comprising of two faculty members (one must be a computer engineering faculty member) should be identified who can guide you in the project implementation,
 - Students are required to submit a completed project report of their project findings two-weeks prior to the final project presentation.
 - A culminating 30-minute open presentation (with poster, slides, or actual products) must be scheduled with the project advisor and the committee member.
 - The advisor and committee must approve the presentation and documentation of the project to receive a passing grade.
 - Passing grade for the project is B+ or above. If students receive a grade below B+ they are required to resubmit.