

## Computer Engineering MS Thesis Research

Thesis is an independent investigation of a research problem that contributes to the state of the art. Students in the thesis option will conduct research with a faculty advisor to answer a fundamental science/engineering question that contributes to new knowledge in the field. Students are expected to formulate the problem under the faculty advisor's guidance and conduct extensive quantitative or qualitative analyses with sound methodology. The findings through thesis research should be repeatable and generalizable, with sufficient quality to make them publishable in technical conferences and/or journals.

For successful completion of the thesis, it is important that the graduate student identifies a thesis research topic that best suits their interests.

The following is a timeline recommended for thesis students:

- Semester 1: Graduate Seminar
- Semester 2: Thesis Credit(s) + Graduate Electives
- Semester 3: Thesis Credit(s) + Thesis Defense

The following steps are also part of thesis research:

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 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. **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.
4. **Thesis Defense and Paper Submission:** The thesis defense is the culmination of the graduate student's thesis research process, approved and signed by the three-committee members. Two of the committee members should be from the computer engineering department. An associated research paper should be submitted or published in either a peer reviewed journal or conference.
5. **Thesis Completion Requirements**
  - Students must submit a completed thesis document to the committee two weeks prior to the defense.
  - The advisor and committee must approve the thesis document before the defense.
  - All committee members should sign the thesis cover page and the student must submit the final completed document to the library before the due date for that term. General instructions for library submission can be found by visiting [RIT Libraries](#).

- Thesis findings should be submitted as a research paper in a peer reviewed conference/journal.