ELECTRICAL AND COMPUTER ENGINEERING MS

The MS in Electrical and Computer Engineering is designed to serve those students who wish to obtain advanced knowledge in the design of high-speed electronic systems or computer-based systems. This knowledge helps prepare students for a doctoral program or an intermediate level position in the industry.

Requirements for the MS Degree in Electrical and Computer Engineering

Completion of all requirements as established by the department graduate committee, the graduate advisory committee, and Graduate Studies, to include:

1. Completion of an approved program consisting of 30 units of 400/500/600-level courses as follows:
   a. Completion of the 12-unit core.
   b. Completion of 18 units of approved 400/500/600 level elective courses.
   c. At least 18 units, including a thesis or project if chosen, must be in electrical and computer engineering (EECE); remaining units may be selected from electrical or computer engineering or in related areas with the approval of the Graduate Coordinator.
   d. At least 18 of the units required for the degree must be 600-level EECE courses.
   e. At the discretion of the academic program, a maximum of 30 percent of the units counted toward the degree requirements may be special session credit earned in non-matriculated status combined with all transfer coursework. This applies to special session credit earned through Open University, or in courses offered for academic credit through Professional & Continuing Education. (Correspondence courses and UC Extension coursework are not acceptable for transfer).
2. Completion and final approval of one of the following three plans as specified by the graduate advisory committee:
   a. Thesis Plan. This plan includes 24 units of coursework and 6 units of thesis research (EECE 699T). Research may be theoretical or applied, but must reflect an individual in-depth study into an approved topic. This plan requires a formal research thesis which must be submitted to the Office of Graduate Studies for approval and accession to the library.
   b. Project Plan. Requirements for this plan consist of 27 units of coursework and 3 units of project preparation (EECE 699P). The project must show how analysis and design have been applied to a particular area of electronic or computer engineering. A written project description must be submitted to the Office of Graduate Studies for approval and accession to the library.
   c. Examination Plan. Requirements for this plan consist of 30 units of coursework and a comprehensive written examination prepared by the faculty. The three-hour examination will cover areas covered in EECE 615, EECE 643, and EECE 682.
3. Approval by the Graduate Coordinator and the Graduate Coordinators Committee on behalf of the faculty of the University.

Course	Title	Units
Core Requirements		
EECE 615	High-Frequency Design Techniques	4
EECE 643	Digital Design	4
EECE 682	Computer Control of Dynamic Systems	4
Electives		
Select 18 units of approved 400/500/600 level courses		18
Total Units		**30**

Graduate Grading Requirements

All courses in the major (with the exceptions of Independent Study - 697, Master's Project - 699P, and Master's Thesis - 699T) must be taken for a letter grade, except those courses specified by the department as ABC/No Credit (400/500-level courses), AB/No Credit (600-level courses), or Credit/No Credit grading only. A maximum of 10 units combined of ABC/No Credit, AB/No Credit, and Credit/No Credit grades may be used on the approved program (including 697, 699P, 699T and courses outside the major). While grading standards are determined by individual programs and instructors, it is also the policy of the University that unsatisfactory grades may be given when work fails to reflect achievement of the high standards, including high writing standards, expected of students pursuing graduate study.

Students must maintain a minimum 3.0 grade point average in each of the following three categories: all coursework taken at any accredited institution subsequent to admission to the master's program; all coursework taken at CSU, Chico subsequent to admission to the program; and all courses on the approved master's degree program.

In addition, students may not count more than two courses in which they received a grade of C toward the approved program.

Continuous enrollment is required. At the discretion of the academic program, a maximum of 30 percent of the units counted toward the degree requirements may be special session credit earned in non-matriculated status combined with all transfer coursework. This applies to special session credit earned through Open University, or in courses offered for academic credit through Professional & Continuing Education.

Graduate Time Limit

All requirements for the degree are to be completed within five years of the end of the semester of enrollment in the oldest course applied toward the degree. See Master's Degree Requirements (https://catalog.csuchico.edu/graduate-requirements/masters-degree-requirements/) in the *University Catalog* for complete details on general degree requirements.

Graduate Requirement in Writing Proficiency

All students must demonstrate competency in writing skills as a requirement for graduation. Electrical Engineering students will demonstrate their writing competence through successfully completing either a departmentally administered examination or EECE 335. Consult the Graduate Coordinator for specific information.

Admission to the Master of Science in Electrical and Computer Engineering is being **reinstated for fall 2024.**

Prerequisites for Admission to Conditionally Classified Status

1. Satisfactory grade point average as specified in Graduate and Postbaccalaureate Admission Requirements (https://catalog.csuchico.edu/graduate-requirements/graduate-postbaccalaureate-admission-requirements/).
2. Approval by the department and Graduate Studies.
3. A professionally accredited baccalaureate in electrical or computer engineering, or an equivalent approved by Graduate Studies.
4. Successful completion of the Graduate Record Examination if required by the Graduate Coordinator.

Prerequisites for Admission to Classified Status

In addition to any requirements listed above:

1. Successful completion of the Graduate Writing Examination.
2. Completion of background preparation equivalent to the following undergraduate courses: EECE 237, EECE 315, EECE 320, EECE 343, EECE 344, EECE 365, EECE 482 or MECA 482, and MATH 260.

All required undergraduate electrical and computer engineering (ECE) courses must be taken for a letter grade, and a grade of C or higher must be earned in each course. Students are required to complete the background courses, if needed, immediately as a matter of reasonable progress toward the master's degree.

Advancement to Candidacy

In addition to any requirements listed above:

1. Formation of the graduate advisory committee in consultation with the Graduate Coordinator.
2. Development of an approved program, including a thesis or project proposal if the thesis or project plan is chosen, in consultation with the Graduate Coordinator.
3. Classified graduate standing and completion at the University of at least 9 units of the proposed program with a minimum 3.00 grade point average.