

COMPUTER SCIENCE MS

The Master of Science in Computer Science welcomes students from all undergraduate disciplines. The program is designed to accommodate students with and without a computer science background. Students without prior computer science coursework can take all required prerequisite courses after being admitted. The program provides a hands-on curriculum that prepares graduates to succeed in many aspects of the American software industry.

Requirements for the MS in Computer Science

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 work as follows:
 - a. At least 18 of the units required for the degree in 600-level courses.
 - b. Completion of three graduate core courses (nine units): CSCI 608, CSCI 611, or CSCI 612; CSCI 630 and CSCI 650.
 - c. Completion of one-two elective Computer Science (CSCI) 600-level course (three-six units), depending on culminating activity.
 - d. Completion of four elective courses (12 units) selected from: the 500 and 600 level Computer Science (CSCI) courses, CSCI 411, CSCI 446, CSCI 448, CSCI 448, EECE 446, and EECE 555.
 - e. CSCI 605 may not be taken to meet program requirements.
 - f. Completion of a culminating activity (p. 1) course (three-six units) in one of the three plans described below.
 - g. 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. Transfer courses must be approved by the Graduate Coordinator.
2. Culminating Activity: Completion and final approval of one of the following three plans as approved by the Graduate Coordinator. The most common culminating experience for master's students in Computer Science is to demonstrate competency in graduate study by completion of the capstone course using plan (a).
 - a. **Capstone Course Plan**
This plan includes 30 units of in-class coursework, including a passing score in the capstone course CSCI 693. CSCI 693 is to be taken as part of the last 9 units, or during the last semester of the graduate program. Registration in CSCI 693 must be approved by the Graduate Coordinator. The course may be attempted a maximum of three times. Failure on the third attempt will result in dismissal from the graduate program in Computer Science.
 - b. **Project Plan**
The project plan includes 27 units of in-class coursework and 3 units of project preparation (CSCI 699P). For students to be qualified to take the project path, they must have demonstrated exceptional abilities by:
 - i. maintaining a GPA of 3.5 or above in their post-baccalaureate coursework,

- ii. having been nominated by a faculty member,
- iii. having had a project proposal approved by a 2/3 majority vote of the faculty. A formal written description of the project must be submitted to Graduate Studies for approval and accession to the library.

c. Thesis Plan

This plan includes 24-27 units of in-class coursework and 3-6 units of thesis preparation (CSCI 699T). Students opting to complete six units of CSCI 699T may count three units of the units as their elective course in 1(c) above. For students to be qualified to take the thesis path, they must have demonstrated exceptional abilities by:

- i. maintaining a GPA of 3.5 or above in their post-baccalaureate coursework,
- ii. having been nominated by a faculty member to conduct research,
- iii. having had a thesis proposal approved by a 2/3 majority vote of the faculty. This plan requires a formal research thesis, which must be submitted to Graduate Studies for approval and accession to the library.

3. Approval by the Graduate Coordinator and the Graduate Council on behalf of the faculty of the University.

Graduate Grading Requirements

All courses in the major (with the exceptions of Comprehensive Examination - 696, 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 696, 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 Chico State subsequent to admission to the program; and all courses in the approved master's degree program. Failure to maintain a 3.0 average in any category will result in academic notice in the master's program. Failure to remedy the deficiency within one semester with appropriate courses approved by the program coordinator may result in disqualification from the master's program. See Graduate Education Policies (<https://catalog.csuchico.edu/graduate-requirements/graduate-education-policies/#academicstanding>) for more information.

In addition, students may not count more than two courses in which they receive 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. Correspondence courses and UC Extension coursework are not acceptable for transfer.

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/>) for complete details on general degree requirements.

Due to the rapid changes in the field of computer science, the Department of Computer Science requires all candidates to complete the program within five years, including projects and theses. No course validation will be allowed and no program extensions will be granted.

Graduate Requirement in Writing Proficiency

All students must demonstrate competency in writing skills as a requirement for graduation. Computer science students will demonstrate their writing competence in the English language by successfully passing CSCI 693, CSCI 699P, or CSCI 699T.

Prerequisites for Admission to Conditionally Classified Status

1. Meet all Graduate Studies requirements 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. An acceptable baccalaureate from an accredited institution, or an equivalent approved by Graduate Studies.
4. Completion of the Graduate Record Examination (GRE) with a combined score of 300 on the verbal and quantitative portions. Graduates of an ABET accredited program in computer science are exempt from this requirement.
5. Submission of a statement of purpose.
6. Submission of two letters of reference.

Prerequisites for Admission to Classified Status

In addition to any requirements listed above:

1. Completion of program prerequisites equivalent to the courses below.
2. Students are expected to complete these courses without delay.
3. Courses taken for the purpose of advancement to classified status will not be used towards the MS degree.
4. Meet Graduate Studies requirements.

Course	Title	Units
CSCI 111	Programming and Algorithms I	4
CSCI 211	Programming and Algorithms II ¹	4
CSCI/MATH 217	Discrete Mathematics	3
CSCI 311	Algorithms and Data Structures ¹	4
CSCI 370	Introduction to Databases	3

CSCI 430	Software Engineering	3
CSCI 440	Operating Systems	4

¹ Only courses from ABET accredited programs may be used for CSCI 211 and CSCI 311.

Advancement to Candidacy

In addition to any requirements listed above:

1. Completion of the Graduate Requirement in Writing Proficiency.
2. Classified graduate standing and completion of, or enrollment in, the graduate core courses.
3. Development of an approved program in consultation with the Graduate Coordinator.
4. Formation of the graduate advisory committee, in the case of the thesis or project plan as described below, in consultation with the Graduate Coordinator.
5. Meet Graduate Studies requirements.

Definition of Blended Programs

A blended bachelor's and master's degree program combines an existing Chico State bachelor's degree with an existing Chico State master's degree; the blended program allows up to 12 units of the graduate program units to be double-counted at the undergraduate level, for a minimum of 138 units to receive both degrees. Students who complete a blended program will receive both a bachelor's and master's degree. Upon completion of 120 semester units and with the completion of all requirements for the bachelor's degree, students in blended programs will be awarded the bachelor's degree. Upon completion of the requirements for the master's degree, students will be awarded the master's degree.

Students interested in applying to a blended program must be enrolled in a bachelor's degree program at Chico State and must meet and maintain the minimum GPA of the existing master's degree entrance requirements for all bachelor's coursework completed at the time of the application to the blended program, or show promise to reach this level as determined by the program. Once admitted to the blended program, students shall not be required to apply for admission to the master's program.

Blended BS + MS in Computer Science

The blended BS + MS in Computer Science is for highly motivated, well-qualified students. The program allows a student majoring in computer science to progress toward the master's degree in computer science while still an undergraduate. Up to 12 units of approved 400, 500, or 600-level courses from the BS can be double-counted towards the MS if they are completed with a grade of B or higher.

Eligibility

To be eligible to apply for the blended BS + MS in computer science a student must meet the following minimum criteria:

- be an undergraduate with a declared major in computer science,
- have at least junior status and completion of at least 12 upper-division units of Computer Science (CSCI) courses including CSCI 311,
- meet a minimum GPA requirement of 2.5 in the major.

Application Procedure

Application deadlines: April 1 for fall start, November 1 for spring start.

Students who meet the eligibility criteria may submit an application for admission to the blended program (<https://csuchico.my.site.com/BlendedProgram/s/>). Formal application through Cal State Apply is not necessary and the student is not required to pay an application fee. GRE scores are not required. Students must meet the requirements outlined below to change to blended graduate status and continue toward the master's degree.

Grading Requirement

Once in the blended program, students must maintain a minimum 3.0 GPA during their remaining undergraduate and graduate semesters.

Transition to Graduate Status

Students can transition to the graduate program after completing all undergraduate degree requirements with a minimum 2.5 GPA in all coursework. The Office of Graduate Studies and the Graduate Coordinator will verify graduate program eligibility at the end of the semester in which the bachelor's degree is completed. Qualified students change to graduate status effective the following semester.

Requirements for the Blended BS + MS in Computer Science

Once accepted into the blended program as an undergraduate, students can take up to 12 units of graduate-level courses to meet the requirements for the MS. The requirements for the BS in computer science are as described in the catalog section for the BS in Computer Science (<https://catalog.csuchico.edu/colleges-departments/college-engineering-computer-science-construction-management/computer-science/computer-science-bs/#programrequirements>); the requirements for the MS are as described in the catalog section for the MS in Computer Science (p. 1).