

SOFTWARE ENGINEERING CERTIFICATE

Department of Computer Science, College of Information Science & Technology

Vision Statement

Software engineering is the systematic application of engineering and computer science principles to the development, maintenance and analysis of complex software systems. The demand for software engineers is very high, and is expected to continue for many years to come. The certificate in software engineering will provide students with technical knowledge and skills to apply modern software engineering processes, methods, and tools to tackle real-world requirements, equipping them for career advancement as software professionals.

Program Contact Information

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Program Website (<https://www.unomaha.edu/college-of-information-science-and-technology/academics/degrees-programs.php>)

Admissions

General Application Requirements and Admission Criteria (<http://catalog.unomaha.edu/graduate/admission/>)

Program-Specific Requirements

Application Deadlines (Spring 2024, Summer 2024, and Fall 2024)

- Fall: July 1
- Spring: November 1
- Summer: March 1

Other Requirements

- **English Language Proficiency:** Applicants are required to have a command of oral and written English. Those who do not hold a baccalaureate or other advanced degree from the United States, **OR** a baccalaureate or other advanced degree from a predetermined country on the waiver list, must meet the minimum language proficiency score requirement in order to be considered for admission.
 - Internet-based TOEFL: 80, IELTS: 6.5, PTE: 53, Duolingo: 110
- **Resume:** Submit a detailed resume highlighting your work experience and background (if applicable)

Degree Requirements

Code	Title	Credits
Prerequisite Courses		
CSCI 3320/8325	DATA STRUCTURES	3

CSCI 4830/8836	INTRODUCTION SOFTWARE ENGINEERING	3
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Code	Title	Credits
Required Courses		

If a required course is waived, it must be replaced with another course from the electives list below.

CSCI 8700	SOFTWARE SPECIFICATIONS AND DESIGN	3
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CSCI 8710	MODERN SOFTWARE DEVELOPMENT METHODOLOGIES	3
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Elective Courses

Select two of the following: 6

CSCI 8256	HUMAN COMPUTER INTERACTION	
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CSCI 8266	USER EXPERIENCE DESIGN	
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CSCI 8420	SOFTWARE ASSURANCE	
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CSCI 8430	TRUSTED SYSTEM DESIGN, ANALYSIS AND DEVELOPMENT	
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CSCI 8760	FORMAL METHODS IN SOFTWARE ENGINEERING	
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CSCI 8790	ADVANCED TOPICS IN SOFTWARE ENGINEERING	
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Total Credits 12

Completion of the Certificate

During what is expected to be the semester the certificate is completed and prior to the posted deadline, students should apply for the certificate through MavLINK on or before the deadline. Information can be found here (<http://www.ses.unomaha.edu/registrar/graduate.php>). If you complete the application form and do not complete all of the requirements for the certificate, contact the Office of Graduate Studies as soon as possible. You must reapply during the next semester in which you expect to complete the certificate; no additional fee is charged to reactivate your application.

The following requirements are due 12 working days prior to commencement:

- "Incomplete" and "NR" grades from previous terms must be removed so that the grade will be in the Office of Graduate Studies.
- All fees, fines, and other obligations due the university must be settled.

For students currently enrolled in courses that are a part of their plan of study, enrollment must be maintained in order to complete the certificate. A grade for any current enrollment must be received by the Registrar's Office no later than the close of business on the fifteenth working day following the end of a semester.

Awarding of Graduate Certificates

The Office of Graduate Studies will mail the certificate to students when all requirements are completed and all obligations to the university are satisfied. The Graduate College will not approve any changes in the student's permanent record once the certificate is awarded.