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.

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

Admissions
Application Deadlines (Spring 2021, Summer 2021, and Fall 2021)
- Fall: July 1
- Spring: November 1
- Summer: March 1

Program-Specific Requirements
- Resume
  - Submit a detailed resume highlighting your work experience and background (if applicable)
- 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.
  - A minimum of 550 on the paper-based TOEFL; 80 internet-based; 6.5 IELTS; or 53 PTE is required for this program.
- Applicants with International Transcripts: Any applicant to this program who has completed undergraduate or graduate coursework at an international higher education institution outside of the United States may submit transcripts and degree certificates (with an English translation) in lieu of a course-by-course transcript evaluation from World Education Services (https://www.wes.org/) (WES), Educational Credential Evaluators (https://www.ece.org/) (ECE), or Educational Perspectives (https://www.edperspective.org/). This graduate program will conduct an in-house credential evaluation of your transcript(s).
  - UNO reserves the right to require a course-by-course evaluation from WES, ECE, or Educational Perspectives if the program is unable to complete an evaluation or should there be any questions or concerns about the documentation that is received. You will be notified by the individual program if an external course-by-course evaluation is required.
  - *Note: If you are admitted, official transcripts and degree certificates (with an English translation)/official course-by-course transcript evaluation, and any applicable official exam scores are required.

Degree Requirements

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>CSCI 4830/8836</td>
<td>INTRODUCTION SOFTWARE ENGINEERING</td>
<td>3</td>
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<tr>
<td>CSCI 3320/8325</td>
<td>DATA STRUCTURES</td>
<td>3</td>
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<tr>
<td>CSCI 8700</td>
<td>SOFTWARE SPECIFICATIONS AND DESIGN</td>
<td>3</td>
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<tr>
<td>CSCI 8710</td>
<td>MODERN SOFTWARE DEVELOPMENT METHODOLOGIES</td>
<td>3</td>
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Elective Courses
Select two of the following: 6 credits
- CSCI 8256 HUMAN COMPUTER INTERACTION
- CSCI 8266 USER EXPERIENCE DESIGN
- CSCI 8420 SOFTWARE ASSURANCE
- CSCI 8430 TRUSTED SYSTEM DESIGN, ANALYSIS AND DEVELOPMENT
- CSCI 8760 FORMAL METHODS IN SOFTWARE ENGINEERING
- CSCI 8790 ADVANCED TOPICS IN SOFTWARE ENGINEERING

Total Credits 12