

# Computer Science

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## Department Information

- **Department Chair:**  
Simone Ludwig, Ph.D.
- **Graduate Coordinator:**  
Saeed Salem, Ph.D.
- **Department Location:**  
258 QBB
- **Department Phone:**  
(701) 231-8562
- **Department Email:**  
gradinfo@cs.ndsu.edu
- **Department Web Site:**  
[www.ndsu.edu/cs/](http://www.ndsu.edu/cs/) (<http://www.ndsu.edu/cs/>)
- **Application Deadline:**  
February 1 for fall semester; September 1 for spring semester\*\*
- **Credential Offered:**  
Ph.D., M.S.
- **English Proficiency Requirements:**  
TOEFL ibt 79; IELTS 6.5; Duolingo 105

Code	Title	Credits
<b>Master of Science in Computer Science Degree Requirements</b>		
Semester core courses (required of all students):		
CSCI 713	Software Development Processes	3
CSCI 724	Survey of Artificial Intelligence	3
CSCI 741	Algorithm Analysis	3
CSCI 765	Introduction To Database Systems	3
Additional 700-800 level Computer Science courses selected in consultation with your adviser.		
<b>Thesis Option (Plan A)</b>		<b>32</b>
CSCI 790	Graduate Seminar	2
Additional graduate coursework		8-12
CSCI 798	Master's Thesis	6-10
<b>Comprehensive Study Option (Plan B)</b>		<b>32</b>
CSCI 790	Graduate Seminar	1-3
Additional Graduate Coursework		14-16
CSCI 797	Master's Paper	2-4
<b>Culminating Experience-Based Option (Plan C)</b>		<b>36</b>
Additional Graduate Coursework		24

Students seeking an option in cybersecurity must take 9 credits from the below list.

Code	Title	Credits
Courses numbered CSCI 601-610		
and		
CSCI 669	Network Security	
CSCI 773	Foundations of the Digital Enterprise	

- Research adviser should be selected by the end of the second semester at NDSU.
- Additional 600-800 level Computer Science courses selected in consultation with your adviser.
- A Plan of Study listing coursework and examination committee members should be completed by the end of the second semester at NDSU.
- All course work must be approved by the student's adviser, Supervisory Committee, department chair, and graduate dean through the plan of study.

- A maximum of 9 semester credits may be transferred into the program. There may be a maximum of 3 credits of independent study.
- Comprehensive Examination (on the core courses), only for plan A and B, should be completed by the end of the fourth semester.
- Final Oral Examination on the student's research for plan A and B.

Code	Title	Credits
<b>Bachelor's to Doctor of Philosophy in Computer Science</b>		<b>90</b>
Core Courses: (or their equivalent in transfer or examination credits)		15
CSCI 713	Software Development Processes	
CSCI 724	Survey of Artificial Intelligence	
CSCI 741	Algorithm Analysis	
CSCI 765	Introduction To Database Systems	
CSCI 790	Graduate Seminar	
Additional courses (8-13) selected in consultation with your adviser.		24-39
<b>Research</b>		<b>36-51</b>
CSCI 899	Doctoral Dissertation	

Code	Title	Credits
Master's to Doctor of Philosophy in Computer Science		60
<b>Core Courses: (or their equivalent in transfer or examination credits)</b>		
CSCI 713	Software Development Processes	3
CSCI 724	Survey of Artificial Intelligence	3
CSCI 741	Algorithm Analysis	3
CSCI 765	Introduction To Database Systems	3
CSCI 790	Graduate Seminar	3
<b>Additional courses (3-5) selected in consultation with your adviser.</b>		<b>9-15</b>
CSCI 899	Doctoral Dissertation	30-36

Code	Title	Credits
<b>Students seeking an option in cybersecurity must take 9 credits from the list below.</b>		
Courses numbered CSCI 601-610		
and		
CSCI 669	Network Security	
CSCI 773	Foundations of the Digital Enterprise	

- Students who applied the listed core courses towards a M.S. degree obtained from NDSU can take up to 42 research credits.
- Research adviser should be selected by the second semester at NDSU.
- A Plan of Study listing coursework and supervisory committee members should be completed by the end of the second semester at NDSU.
- Satisfactory completion of the Comprehensive Exam at the Ph.D. level (written exam based on the core courses).
- Research proposal presentation and preliminary oral examination (Qualifying Exam) should be completed by the fourth semester at NDSU after passing the Comprehensive Exam.
- Final Oral Examination on the Ph.D. dissertation.