Computer Science

Department Information

- **Department Chair:**
  Simone Ludwig, Ph.D.

- **Graduate Program Coordinator:**
  Changhui Yan, 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/)

- **Application Deadline:**
  February 1 priority deadline 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

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSCI 713</td>
<td>Software Development Processes</td>
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</tr>
<tr>
<td>CSCI 724</td>
<td>Survey of Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 741</td>
<td>Algorithm Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 765</td>
<td>Introduction To Database Systems</td>
<td>3</td>
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Additional 600-800 level Computer Science courses selected in consultation with your adviser.

**Thesis Option (Plan A)**

Additional graduate coursework

CSCI 790  Graduate Seminar  2
CSCI 798  Master's Thesis  6-10

**Comprehensive Study Option (Plan B)**

Additional Graduate Coursework

CSCI 790  Graduate Seminar  2
CSCI 797  Master's Paper  2-4

**Culminating Experience-Based Option (Plan C)**

Additional Graduate Coursework

Research advisor should be selected by the end of the second semester at NDSU.

- Additional 600-800 level Computer Science courses selected in consultation with your advisor
  - maximum of two courses (6 credits) at the 600 level
  - Field Experience/Practicum credits do not count.
- All course work must be approved by the student’s advisor, supervisory committee, and graduate coordinator through the Plan of Study.
- A Plan of Study listing coursework and examination committee members should be completed by the end of the second semester at NDSU.
- A maximum of 9 credits may be transferred into the program.
- There may be a maximum of 3 credits of independent study.
- Successful completion of the final oral examination on the student’s research for Plan A and B.
### Bachelor's to Doctor of Philosophy

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<th>Code</th>
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<td>Core Courses: (or their equivalent in transfer or examination credits)</td>
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<td>CSCI 713</td>
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<td>CSCI 790</td>
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<td>8-13 additional courses selected in consultation with your adviser.</td>
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<tr>
<td>CSCI 899</td>
<td>Doctoral Dissertation</td>
<td>36-51</td>
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### Doctor of Philosophy in Computer Science degree requirements

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<td>CSCI 790</td>
<td>Graduate Seminar</td>
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<td>3-5 additional courses selected in consultation with your adviser.</td>
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<tr>
<td>CSCI 899</td>
<td>Doctoral Dissertation</td>
<td>30-36</td>
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Research advisor should be selected by the second semester at NDSU.

- A minimum of 15 didactic credits numbered 700-789 or 800-898,
  - at least 9 are not included in the Computer Science core courses listed above
  - none of these can be individual study course credits.
- A maximum of two courses (6 credits) at the 600 level; Field Experience/Practicum credits do not count.
- Students who took core courses as part of their M.S. studies at NDSU should discuss replacement courses with the advisor and the Graduate program coordinator.
- All course work must be approved by the student’s advisor, supervisory committee, and graduate coordinator through the plan of study.
- A Plan of Study listing coursework and supervisory committee members should be completed by the end of the second semester at NDSU.
- 30-51 credit hours of research – The Ph.D. requires a research contribution to be made under the supervision of one of the Computer Science department's graduate faculty members.
- Students who applied the listed core courses towards a M.S. degree obtained from NDSU can take up to 42 research credits.
- Satisfactory completion of the comprehensive examination 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.
- Successful completion of the final defense of the dissertation.

**Some additional information regarding the course work:**

- A student holding a Master of Science degree from an educational institution of recognized standing may use:
  - 30 credits previously completed toward the 90 total credits required for the doctoral degree if the M.S. degree is in Computer Science **OR**
  - Up to 9 credits previously earned graduate level courses with a grade of B or better may be used toward the 90 total credits for the doctoral degree if the M.S. degree is not in Computer Science.
- The 90 credits (including any credits transferred) must be computing-related with at least 39 credits involving significant graduate level computer science material, which are offered by a computer science department.
- The 90 credits may include a maximum of 6 credits of non-didactic courses (independent studies or seminars). Seminars are limited to 3 of those credits.