

### Computer Science, Ph.D.

**Computer Science**  
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Academic Staff: Please refer to Computer Science website (https://sci.umanitoba.ca/cs/people/faculty-profile/) for Faculty information.

**Computer Science Program Information**  
The department offers Master's and Doctoral programs at the graduate level, which cover many areas of computer science.

**Admission Information**  
**Admission to the Faculty of Graduate Studies**  
Application and Admission Procedures are found in the Academic Guide (https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (https://catalog.umanitoba.ca/graduate-studies/academic-guide/doctor-philosophy-general-regulations/) section of the Guide.

**Computer Science Ph.D. Admission Requirements**  
A candidate must normally complete an M.Sc. degree before entering the Ph.D. program. Individual qualifications other than this will be considered.

**Application Information**  
Students should complete and submit their online application with supporting documentation by the date indicated on the Computer Science M.Sc. program of study (https://umanitoba.ca/faculties/graduate_studies/admissions/programs/computer_science.html) page.

**Degree Requirements**  
Students must complete a minimum of 12 credit hours of coursework and a thesis. All credit hours must be at the 7000 level. Students must consult with their departmental advisor prior to deciding on courses. Courses listed will not all be offered in any one particular year.

**Expected Time to Graduate:** 4 years

**Progression Chart**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAD 7300</td>
<td>Research Integrity Tutorial</td>
<td>0</td>
</tr>
<tr>
<td>GRAD 7500</td>
<td>Academic Integrity Tutorial</td>
<td>0</td>
</tr>
<tr>
<td>COMP 7XXX</td>
<td>Computer Science Courses</td>
<td>9</td>
</tr>
<tr>
<td>COURSE 7XXX</td>
<td>GRAD/Approved Course</td>
<td>3</td>
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<tr>
<td></td>
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<td>12</td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAD 8000</td>
<td>Doctoral Thesis</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

1. At least one course in each of the three areas (Theory, Applications, and Systems).
2. Any graduate course in Computer Science or any graduate course from another department included on the list of approved graduate courses.

**Note:**  
- The student is expected to complete the course requirements during the first 24 months of the PhD program.

**Registration Information**  
Students should familiarize themselves with the Faculty of Graduate Studies ‘GRAD’ courses applicable to their program (https://catalog.umanitoba.ca/graduate-studies/registration-information/). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and email their registration request for approval to the graduate program advisor. Any changes, after the initial registration, must also be approved by the advisor.

A listing of available courses can be picked up at the departmental general office. Courses are subject to cancellation if there is insufficient enrolment.

**Regulations**  
Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

**Supplementary Regulations**  
Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

**Bona Fide Academic Requirements (BFAR)**  
Bona Fide Academic Requirements (BFAR) (https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#BFAR) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student’s research or within the student’s first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#GRAD7500) and Mandatory Research Integrity Online Course (https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#BFAR)
Students must also meet additional BFAR that may be specified for their program.

**General Regulations**

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).