# **COMPUTER SCIENCE, M.SC.**

Computer Science **Head:** Dr. David Gerhard

Associate Head (Graduate) / Grad Chair: Dr. Andrea Bunt

Program Advisor: Tetyana Pavlyuk

Campus Address/General Office: E2-445 EITC

**Telephone**: 204-474-8313 **Fax**: 204-474-7609

Email Address: Tetyana.Pavlyuk@umanitoba.ca

Website: umanitoba.ca/science/computer-science (https://

umanitoba.ca/science/computer-science/)

Academic Staff: Please refer to Computer Science website (https://umanitoba.ca/science/directory/computer-science/) 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 Master's students are found in the Master's Degrees General Regulations (https://catalog.umanitoba.ca/graduate-studies/academic-guide/masters-degrees-general-regulations/#Admission\_FGSMasters) section of the Guide.

#### **Computer Science M.Sc. Admission Requirements**

Students may be admitted to the Master's program if they hold an Honours Bachelor's degree in Computer Science and if they present a suitable selection of courses. Admission is not guaranteed and each application will be individually considered by the department's Graduate Studies Committee.

Students can also be admitted to the Master's program upon successful completion of their pre-Master's program.

#### **Pre-Master's Option**

This unit offers a Pre-Master's program of study (https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

The Department of Computer Science does not encourage applications to the pre-Master's program. However, applicants to the M.Sc. program whose previous education did not include topics essential to the area of research they wish to pursue and/or completion of the required coursework, may be offered the opportunity to remedy these deficiencies during a 1-year pre-Master's program of study.

### **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/explore/programs-of-study/computer-science-msc/) page.

### **Degree Requirements**

Students must complete 12 credit hours of coursework and a thesis. All credit hours must be at the 7000 level and must include COMP 7210 Research Methodologies (3 credit hours)

Students must consult with their departmental advisor prior to deciding on courses. Listed courses will not all be offered in any one particular year.

**Expected Time to Graduate:** 2 years

#### **Progression Chart**

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
COMP 7210	Research Methodologies	3
COMP 7XXX	Computer Science Courses <sup>1</sup>	6
COURSE XXXX	GRAD/Approved Course <sup>2</sup>	3
	Hours	12
Year 2		
GRAD 7000	Master's Thesis <sup>3</sup>	0
	Hours	0
	Total Hours	12

- A student may take at most two graduate courses from their advisor(s) for credit in this degree program.
- Can be a graduate course in Computer Science or an approved course from a different department.
- Every thesis M.Sc. student must, in consultation with his or her advisor, choose one of two options to get their thesis proposal approved within the first twelve months in the MSc. Program. They can either (i) write and submit a formal thesis proposal to their advisory committee members; or (ii) present their proposal to their advisory committee members in a formal, scheduled meeting.

#### Note:

 The advisory committee must be appointed within eight months of the start of the student's 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/#GRAD7300).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) 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).