# STATISTICS, PH.D.

Statistics

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Location)

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science/statistics/)

**Academic Staff:** Please refer to the Statistics website (https://umanitoba.ca/science/directory/statistics/) for academic staff

information.

# **Statistics Program Information**

The University of Manitoba offers graduate programs in statistics leading to the Master of Science and Doctor of Philosophy degrees. Applications are encouraged from students with strong interest in statistics, mathematics or related fields.

## **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.

#### **Statistics Ph.D. Admission Requirements**

Completion of a Master's degree in Statistics is usually required for admission to the Ph.D. program.

# **Application Information**

Students should complete and submit their online application with supporting documentation by the date indicated on the Statistics Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/statistics-phd/) page.

## **Degree Requirements**

Students must satisfy the following requirements:

- Within the first two years of the Ph.D. program, a minimum of 6 credit hours of courses must be taken in the areas of Advanced Theory of Probability, Advanced Theory of Inference, Advanced Applied Statistics, and Advanced Stochastic Processes.
- Candidates are required to attempt and successfully complete
  at least twelve credit hours at the 7000 level. These courses will
  normally be taken from the Department of Statistics. Courses will
  normally be recommended by the candidate's supervisor.
- Each Ph.D. student is required to present at least one public seminar in the area of their Ph.D. research.
- Candidates are required to pass a candidacy examination. The candidacy examination should normally be completed within one year after the formation of the student's Advisory Committee, but no later than one year prior to expected graduation. The candidacy

examination will be set and administered by the candidate's Ph.D. advisory committee. The format may vary.

· A thesis is required.

Expected Time to Graduate: 5 years

#### **Progression Chart**

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	0
Years 1-2		
STAT 7XXX	Statistics courses <sup>1</sup>	12
	Hours	12
Year 2		
GRAD 8010	<b>Doctoral Candidacy Examination</b>	0
	Hours	0
Year 3		
GRAD 8000	Doctoral Thesis	0
	Hours	0
Year 4		
GRAD 8010	<b>Doctoral Candidacy Examination</b>	0
	Hours	0
	Total Hours	12

A minimum of 6 credit hours of courses must be taken in the areas of Advanced Theory of Probability, Advanced Theory of Inference, Advanced Applied Statistics, and Advanced Stochastic Processes.

## **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 new and returning graduate students in the Department of Statistics must consult with the grad chair and the graduate program assistant prior to attempting to register.

All students must consult with their advisor prior to registration and present a completed registration form to 318 Machray Hall. Any changes, after the initial registration, must also be approved by the advisor.

# 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).