



### ***Twin Cities Campus***

## **Animal Sciences Ph.D.**

*Animal Science*

**College of Food, Agricultural and Natural Resource Sciences**

Link to a [list of faculty](#) for this program.

### **Contact Information:**

Department of Animal Science, 305 Haecker Hall, 1364 Eckles Avenue, Saint Paul, MN 55108 (612-624-3491; fax: 612-625-5789)

Email: [ansci@umn.edu](mailto:ansci@umn.edu)

Website: <https://www.ansci.umn.edu/graduate-program>

- Program Type: Doctorate
- Requirements for this program are current for Spring 2020
- Length of program in credits: 48
- This program does not require summer semesters for timely completion.
- Degree: Doctor of Philosophy

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Students in the PhD program concentrate on one of the animal sciences emphasis areas: genetics, nutrition, physiology, or production systems. Students have the option of tailoring their program to include study in more than one emphasis area and to emphasize basic or applied science.

## **Program Delivery**

This program is available:

- via classroom (the majority of instruction is face-to-face)

## **Prerequisites for Admission**

The preferred undergraduate GPA for admittance to the program is 3.00.

A bachelor's degree in agriculture or a biological field with training in biology, chemistry, physics, and mathematics is required.

Applicants must submit their test score(s) from the following:

- GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
- IELTS
  - Total Score: 6.5
- MELAB
  - Final score: 80

The preferred English language test is Test of English as Foreign Language

Key to [test abbreviations](#) (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

## **Program Requirements**

24 credits are required in the major.

24 thesis credits are required.

This program may be completed with a minor.



Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

#### **Ethics Requirement**

All students are required to be trained in ethical issues in science. Please select one course from the list below to meet this requirement.

[ANSC 5091](#) - Research Proposals: From Ideas to Strategic Plans (3.0 cr)

or [ANSC 8134](#) - Ethical Conduct of Animal Research (3.0 cr)

or [APSC 8123](#) - Research Ethics in the Plant and Environmental Sciences (0.5 cr)

or [PLPA 8123](#) - Research Ethics in Plant and Environmental Sciences (0.5 cr)

or [SOIL 8123](#) - Research Ethics in the Plant and Environmental Sciences (0.5 cr)

or [WRS 8581](#) - Research and Professional Ethics in Water Resources and Environmental Science (0.5 cr)

#### **Seminar Requirement**

All doctoral students are required to take 6 credits of AnSc 8510 Graduate Seminar

[ANSC 8510](#) - Graduate Seminar (1.0 cr)

#### **Thesis Requirement**

All doctoral students are required to take 24 thesis credits of AnSc 8888 Graduate Seminar

[ANSC 8888](#) - Thesis Credit: Doctoral (1.0 - 24.0 cr)

#### **Major Coursework**

Students are required to take 15 to 17.5 credits in consultation with adviser.