Animal Sciences

http://www.ansci.illinois.edu

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Graduate Program Coordinator: Sandra Rodriguez-Zas
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Major: Animal Sciences
Degrees offered: M.S., Ph.D.

Major: Bioinformatics
Degrees offered: M.S.
Graduate Concentration: Animal Sciences

Medical Scholars Program: Doctor of Philosophy (Ph.D.) in Animal Sciences and Doctor of Medicine (M.D.) through the Medical Scholars Program (http://www.med.illinois.edu/mdphd)

Graduate Degree Programs
The Department of Animal Sciences offers graduate work leading to the Master of Science and Doctor of Philosophy degrees. Fields of specialization include:

- animal breeding and genetics
- animal behavior
- biochemistry
- environmental physiology
- immunobiology
- meat science and muscle biology
- microbiology
- nutrition
- systems of animal management and production
- physiology of lactation
- physiology of reproduction

Beef and dairy cattle, horses, poultry, sheep, swine, and a variety of companion and laboratory animals are available for study.

The genomic and proteomic projects are generating large amounts of complex biological data that require effective storage, retrieval, analysis and interpretation. The bioinformatics degree program provides students with the skills necessary to augment the understanding and use of agricultural, biological and medical information and resources through the application of molecular, chemical, physical, computational, statistical, mathematical and informatic techniques. Students interested in this program may come with undergraduate training in one of the following areas:

1. biological and agricultural sciences,
2. statistical, mathematical and computer sciences,
3. informatics and engineering sciences.

Graduates from the Bioinformatics program will be able to integrate basic and applied concepts in the three areas and applied them to biotechnology and medical research.

Admission
Candidates for admission to the M.S. and Ph.D. programs must have a bachelor's degree from an accredited institution equivalent to those from the University of Illinois at Urbana-Champaign. A grade point average of 3.0 or higher (A = 4.0) for the last two years of undergraduate work and for any graduate study is required for admission. Students must take the Graduate Record Examination (GRE) and are recommended to take the advanced test in biology. English proficiency requirements for admission follow Graduate College requirement. Emphasis is placed on a student's interest and ability in research as demonstrated by previous work and letters of recommendation. Admission is possible for spring and summer semesters.

Medical Scholars Program
The Medical Scholars Program permits highly qualified students to integrate the study of medicine with study for a graduate degree in a second discipline, including Animal Sciences. Students may apply to the Medical Scholars Program prior to beginning graduate school or while in the graduate program. Applicants to the Medical Scholars Program must meet the admissions standards for and be accepted into both the doctoral graduate program and the College of Medicine. Students in the dual degree program must meet the specific requirements for both the medical and graduate degrees. On average, students take eight years to complete both degrees. Further information on this program is available by contacting the Medical Scholars Program, 125 Medical Sciences Building, (217) 333-8146 or at www.med.illinois.edu/msp (http://www.med.illinois.edu/msp).

Graduate Teaching Experience
Experience in teaching is considered a vital part of the graduate program and is encouraged as part of the academic work of students in this program.

Financial Aid
Financial aid for graduate students is available in the form of fellowships, teaching and research assistantships, tuition and partial fee waivers, and traineeships. Qualified candidates are considered for financial support upon application. Graduate students making satisfactory progress toward their degrees generally receive a full tuition waiver and a partial fee waiver, as well as a stipend.

- Master of Science in Animal Sciences (http://catalog.illinois.edu/graduate/graduate-majors/animal-sci/ms-animal-science)
- Master of Science in Bioinformatics, Animal Sciences Concentration (http://catalog.illinois.edu/graduate/graduate-majors/animal-sci/ms-bioinformatics)

Doctor of Philosophy in Animal Sciences (Entering with an approved Master's Degree)
Students must pass preliminary and final examinations administered by committees appointed by the dean of the Graduate College.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced lecture and laboratory courses (400- and 500-level courses; excludes ANSC 590 and ANSC 599)</td>
<td>20-28</td>
<td></td>
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<tr>
<td>Graduate seminar (ANSC 590) enrollment is required every semester (max 4 hours can be applied to the degree)</td>
<td>4</td>
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Information listed in this catalog is current as of 03/2018
ANSC 599  Thesis Research (min/max applied toward degree)  32-40

Total Hours  64

Other Requirements

Other requirements and conditions may overlap

<table>
<thead>
<tr>
<th>Masters Degree Required for Admission to PhD?</th>
<th>Masters level requirements must be met</th>
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<tbody>
<tr>
<td>Qualifying Exam Required:</td>
<td>No</td>
</tr>
<tr>
<td>Preliminary Exam Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Final Exam/Dissertation Defense Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Dissertation Deposit Required:</td>
<td>Yes</td>
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<tr>
<td>Minimum GPA:</td>
<td>3.0</td>
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</table>

Doctor of Philosophy in Animal Sciences
(Entering with an approved baccalaureate degree)

Students must pass a qualifier examination and preliminary and final examinations administered by committees appointed by the dean of the Graduate College.

Students enrolled in this baccalaureate to Doctor of Philosophy program will not be granted automatically a Masters in Animal Sciences degree. Students enrolled in the baccalaureate to Doctor of Philosophy that wish to receive a Masters degree will be transferred to the Masters in Animal Sciences program and will be expected to fulfill the requirements to secure a Masters degree. Students that secure a Masters in Animal Sciences can be transferred to the Doctor of Philosophy program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 599</td>
<td>Advanced lecture and laboratory courses (400- and 500-level courses; excludes ANSC 590 and ANSC 599)</td>
<td>42-50</td>
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<td>ANSC 599</td>
<td>Graduate seminar (ANSC 590) enrollment is required every semester (max 4 hours can be applied to the degree)</td>
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<tr>
<td>ANSC 599</td>
<td>Thesis Research (min/max applied toward degree)</td>
<td>40-48</td>
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</table>

Total Hours  96

Other Requirements

Other requirements and conditions may overlap

| Masters Degree Required for Admission to PhD? | No |
| Qualifying Exam Required:                     | Yes |
| Preliminary Exam Required:                    | Yes |
| Final Exam/Dissertation Defense Required:     | Yes |
| Dissertation Deposit Required:                | Yes |
| Minimum GPA:                                  | 3.0 |

1 For additional details and requirements refer to the department’s Graduate Handbook (http://ansci.illinois.edu/grads/degree-requirements) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook).