COMPUTER SCIENCE + ANIMAL SCIENCES, BS

for the degree of Bachelor of Science Major in Computer Science & Animal Sciences

animal sciences department information: https://ansc.illinois.edu/
computer science degree information: https://cs.illinois.edu/academics/undergraduate/degree-program-options/cs-x-degree-programs#requirements

overview of college admissions & requirements: Agricultural Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#text)
college websites: https://aces.illinois.edu/ and https://engineering.illinois.edu
computer science email: undergrad@cs.illinois.edu (academic@cs.illinois.edu)
animal sciences email: ANSCadvising@illinois.edu

Please see the Computer Science advisor in 1210 Siebel Center, as well as the Animal Sciences Undergraduate Curriculum Coordinator, Dr. David Miller, 116 Animal Sciences Lab.

for the degree of Bachelor of Science Major in Computer Science & Animal Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>RHET 105</td>
<td>Writing and Research</td>
<td>6-7</td>
</tr>
<tr>
<td>&amp; CMN 101</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>CMN 111</td>
<td>Oral &amp; Written Comm I</td>
<td></td>
</tr>
<tr>
<td>&amp; CMN 112</td>
<td>Oral &amp; Written Comm II</td>
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Advanced Composition (students select from Gen Ed List) 3-4

Cultural Studies
- Western Culture (students select from Gen Ed List)
- Non-Western Culture (students select from Gen Ed List)
- US Minority Culture (students select from Gen Ed List)

Language other than English (at or above 3rd level) 8

Natural Sciences and Technology
- CHEM 102 General Chemistry I
- & CHEM 103 and General Chemistry Lab I
- CHEM 104 General Chemistry II
- & CHEM 105 and General Chemistry Lab II

Humanities and the Arts (students select from Gen Ed List) 6

Social and Behavioral Sciences
- ECON 102 Microeconomic Principles
- or ACE 100 Introduction to Applied Microeconomics
- Students choice from Gen Ed List

Mathematical Foundations (fulfills Quantitative Reasoning I & II)
- CS 361 Probability & Statistics for Computer Science
- MATH 220 Calculus
- or MATH 221 Calculus I

Computer Sciences Core
- CS 100 Freshman Orientation
- CS 125 Intro to Computer Science
- CS 126 Software Design Studio
- CS 173 Discrete Structures
- CS 225 Data Structures
- CS 374 Introduction to Algorithms & Models of Computation
- CS 357 Numerical Methods I
  or CS 421 Programming Languages & Compilers

Computer Science Technical Track (two options)
- CS 233 Computer Architecture
- & CS 241 System Programming
  OR
- CS 240 Introduction to Computer Systems
- & Two CS Any two (2) 400-level CS courses except
- 400 CS 491

Animal Sciences Core
- ANSC 100 Intro to Animal Sciences
- ANSC 211 Breeding Animal Evaluation
- ANSC 219 Meat Technology
- ANSC 221 Cells, Metabolism and Genetics
- ANSC 222 Anatomy and Physiology
- ANSC 223 Animal Nutrition
- ANSC 224 Animal Reproduction and Growth
- ANSC 398 UG Experiential Learning
- ANSC 498 Integrating Animal Sciences

Applied Animal Sciences Courses (choose 3) 9
- ANSC 201 Principles of Dairy Production
- ANSC 204 Intro Dairy Cattle Evaluation
- ANSC 205 World Animal Resources
- ANSC 206 Horse Management
- ANSC 301 Food Animal Production, Management, and Evaluation
- ANSC 302 Human Animal Interactions
- ANSC 307 Companion Animal Management
- ANSC 309 Meat Production and Marketing
- ANSC 310 Meat Selection and Grading
- ANSC 312 Advanced Livestock Evaluation
- ANSC 313 Horse Appraisal
- ANSC 314 Adv Dairy Cattle Evaluation
- ANSC 322 Livestock Feeds and Feeding
- ANSC 370 Companion Animal Policy
- ANSC 400 Dairy Herd Management
- ANSC 401 Beef Production
- ANSC 402 Sheep and Goat Production
- ANSC 403 Pork Production
- ANSC 404 Poultry Science
- ANSC 405 Advanced Dairy Management
- ANSC 407 Animal Shelter Management

Information listed in this catalog is current as of 02/2021
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<tr>
<td>ANSC 424</td>
<td>Pet Food &amp; Feed Manufacturing</td>
</tr>
<tr>
<td>ANSC 435</td>
<td>Milk Quality and Udder Health</td>
</tr>
<tr>
<td>ANSC 437</td>
<td>Adv Reproductive Management</td>
</tr>
<tr>
<td>ANSC 471</td>
<td>ANSC Leaders &amp; Entrepreneurs</td>
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</tbody>
</table>

**Basic Animal Sciences Courses (choose 3)** 9

- ANSC 251  Epidemics and Infectious Diseases
- ANSC 306  Equine Science
- ANSC 331  Biology of Reproduction
- ANSC 350  Cellular Metabolism in Animals
- ANSC 363  Behavior of Domestic Animals
- ANSC 366  Animal Behavior
- ANSC 406  Zoo Animal Conservation Sci
- ANSC 409  Meat Science
- ANSC 420  Ruminant Nutrition
- ANSC 421  Minerals and Vitamins
- ANSC 422  Companion Animal Nutrition
- ANSC 431  Advanced Reproductive Biology
- ANSC 438  Lactation Biology
- ANSC 440  Applied Statistical Methods I
- ANSC 441  Human Genetics
- ANSC 444  Applied Animal Genetics
- ANSC 445  Statistical Methods
- ANSC 446  Population Genetics
- ANSC 447  Advanced Genetics and Genomics
- ANSC 448  Math Modeling in Life Sciences
- ANSC 449  Biological Modeling
- ANSC 450  Comparative Immunobiology
- ANSC 451  Microbes and the Anim Indus
- ANSC 452  Animal Growth and Development
- ANSC 453  Stem Cell Biology
- ANSC 457  Advanced Ruminant Nutrition
- ANSC 467  Applied Animal Ecology
- ANSC 509  Muscle Biology
- ANSC 510  Animal Stress Physiology
- ANSC 520  Protein and Energy Nutrition
- ANSC 521  Regulation of Metabolism
- ANSC 522  Advanced Ruminant Nutrition
- ANSC 523  Techniques in Animal Nutrition
- ANSC 524  Nonruminant Nutrition Concepts
- ANSC 525  Topics in Nutrition Research
- ANSC 526  Adv Companion Animal Nutrition
- ANSC 533  Repro Physiology Lab Methods
- ANSC 541  Regression Analysis
- ANSC 542  Applied Bioinformatics
- ANSC 543  Bioinformatics
- ANSC 545  Statistical Genomics
- ANSC 554  Immunobiological Methods
- ANSC 561  Animal Stress Physiology

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