# ANIMAL SCIENCE

## What can I do with this major?

### AREAS

#### PRODUCTION AND MANAGEMENT
- **Livestock Production:**
  - Dairy Cattle, Beef Cattle, Swine, Equine, Sheep, Goat, Poultry
- **Livestock Feed:**
  - Production, Development, Quality Control, Distribution/Marketing
- **Meat and Dairy Foods:**
  - Production, Development, Quality Control, Distribution/Marketing
- **Inspection**

### EMPLOYERS

- Cow/calf operations
- Stocker or grower programs
- Feedlots
- Grower/finisher operations
- Farrowing operations
- Farrow to finish operations
- Farriers
- Broiler production operations
- Egg production operations
- Wool companies
- Breeding firms
- Feed companies
- Feed processing plants
- Meat, poultry, dairy processors
- Extension services
- Zoos
- Inspection services
- Federal government including:
  - Department of Agriculture:
    - Animal and Plant Health Inspection Service
    - Food Safety and Inspection Service
  - Department of Health and Human Services:
    - Food and Drug Administration

### STRATEGIES

- Develop physical stamina, comfort being outdoors and in close proximity with large and small animals and expect to work irregular hours at times.
- Seek work experience in animal production or related animal industry through internships, summer jobs or part-time positions.
- Pursue a minor in business if interested in management or self-employment.
- Participate in related campus organizations and competition teams such as dairy, poultry and livestock judging and/or academic quadrathlon.
- Become familiar with federal job application procedures for government work.
### AGRIBUSINESS AND COMMUNICATION

**Areas**
- Sales
  - Livestock
  - Feed
  - Pharmaceuticals
  - Agriculture Chemicals
  - Livestock Supplies
  - Equipment: Farm and Feedlot
  - Agriculture Real Estate
- Customer Service
- Management
- Promotion/Marketing
- Public Relations
- Agricultural Journalism

**Employers**
- Agribusinesses: livestock and feed
- Pharmaceutical companies
- Equipment and supply companies
- Food and meat processing companies
- Food distributors
- Animal health companies
- Breed organizations
- Financial institutions
- Livestock publications
- Professional associations, i.e. National Cattlemen's Beef Association

**Strategies**
- Obtain a part-time job or internship in sales to gain experience, as these positions are often stepping stones to higher-level positions.
- Consider earning a business minor to obtain knowledge of fundamental business principles.
- Develop excellent communication, organization and problem solving skills along with initiative.
- Take additional courses in interpersonal communication, public speaking and journalism, if relevant.
- Prepare to work independently during irregular and/or long hours.
- Learn to work well under pressure and to be comfortable in a competitive environment.
- Demonstrate motivation to reach sales quotas while maintaining a commitment to customer satisfaction.
- Seek extensive knowledge of merchandise for sale.
- Join related student organizations and competition teams and seek leadership roles.

### EDUCATION

**Teaching**
- Agriculture Literacy
- Non-classroom Education, i.e. Adult Agricultural Education, Young Farmer Programs
- Extension

**Schools**
- (secondary and post-secondary)
- Extension services
- Agricultural agencies
- Agricultural communications and media firms
- Agribusinesses
- Government agencies

**Strategies**
- Develop excellent communication skills including verbal, written and interpersonal.
- Obtain teacher certification, which varies by state, for public school opportunities.
- Secure master's degree for teaching at community or two-year institutions; a doctoral degree is necessary for college and university teaching.
- Gain related experience through volunteer positions, summer jobs or internships with age group of interest.
- Seek leadership roles in student organizations.
- Be prepared to live in rural communities for extension positions.
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<thead>
<tr>
<th>AREAS</th>
<th>EMPLOYERS</th>
<th>STRATEGIES</th>
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<tr>
<td><strong>VETERINARY MEDICINE</strong></td>
<td>Group or private practice&lt;br&gt;Federal government including:&lt;br&gt;Department of Agriculture:&lt;br&gt;Animal and Plant Health Inspection Service&lt;br&gt;Food Safety and Inspection Service&lt;br&gt;Department of Health and Human Services:&lt;br&gt;Centers for Disease Control and Prevention&lt;br&gt;National Institutes of Health&lt;br&gt;State and local government&lt;br&gt;Colleges of veterinarian medicine&lt;br&gt;Medical schools&lt;br&gt;Research laboratories&lt;br&gt;Animal food companies&lt;br&gt;Inspection services&lt;br&gt;Pharmaceutical companies&lt;br&gt;Zoos&lt;br&gt;Wildlife sanctuaries</td>
<td>Research veterinary programs, take pre-vet courses to meet veterinary school requirements and prepare for application process.&lt;br&gt;Maintain an excellent grade point average, particularly in the sciences, and build relationships with faculty. Strong recommendations from professors are needed for professional school.&lt;br&gt;Pursue extensive laboratory and research experience for research positions.&lt;br&gt;Gain experience in animal health settings, zoos, wildlife sanctuaries, etc. through volunteer positions, part-time jobs or summer work. Consider working as a veterinary technician.&lt;br&gt;Develop physical stamina, confidence working with both small and large animals and in various weather conditions.&lt;br&gt;Plan to work evenings, weekends or on-call for some positions.&lt;br&gt;Exercise close attention to detail and the ability to respond effectively in emergency situations.&lt;br&gt;Practice strong interpersonal skills for dealing with animal owners who may be upset.&lt;br&gt;Consider taking courses in business and communications or pursuing joint MBA/DVM programs, as self-employed veterinarians must effectively promote and manage their own businesses.&lt;br&gt;Seek active roles in pre-vet and other related clubs.</td>
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<tr>
<td><strong>BIOSCIENCE</strong> (biotechnology-driven fields)</td>
<td>Government laboratories</td>
<td>Advanced degrees are often required for these positions. Discuss graduate school options with your adviser on a regular basis; prepare material for application process.</td>
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<td>Research</td>
<td>Corporate laboratories</td>
<td>Pursue extensive laboratory and research experience by working in faculty laboratories through special problems courses, as a student employee or through other departmental programs.</td>
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<tr>
<td>Biomedical Animal Models</td>
<td>Colleges and universities</td>
<td>Develop strong attention to detail, analytical skills and the ability to persevere through specialized research projects.</td>
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<td>Product and Process Development</td>
<td>Livestock producers</td>
<td>Supplement curriculum with additional science courses in relevant areas (genetics, animal behavior, microbiology).</td>
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<td>Animal Genetic Engineering</td>
<td>Breeding firms</td>
<td>Seek experience in area of interest through internships, co-ops or summer or part-time work.</td>
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<td>Genetics and Animal Breeding</td>
<td>Pharmaceutical companies</td>
<td>Plan to work outdoors and closely with small and large animals for some positions.</td>
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<td>Animal Nutrition, Health, Disease Control</td>
<td>Animal health companies</td>
<td>Research post-graduate certification options through the American Association for Laboratory Animal Science (AALAS). Learn federal job application procedures.</td>
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<tr>
<td>Food Science</td>
<td>Zoos</td>
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<td>Product and Process Development</td>
<td>Wildlife sanctuaries</td>
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<td><strong>ANIMAL CARE AND SERVICE</strong></td>
<td>Self-employed</td>
<td>Most people employed in the companion animal industry learn through on the job training.</td>
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<td>Behavior/Training</td>
<td>Shelters</td>
<td>Seek volunteer or paid positions in community facilities, i.e. grooming, rescue, boarding.</td>
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<td>Caretaking</td>
<td>Kennels</td>
<td>Consider training and certifications through organizations such as International Boarding and Pet Services Association and National Dog Groomer’s Association of America, Inc.</td>
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<td>Grooming</td>
<td>Boarding facilities</td>
<td>Expect to work evenings, weekends, holidays and for shifts of 24 hours at a time.</td>
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<td>Breeding</td>
<td>Training facilities</td>
<td>Develop physical stamina, patience and problem-solving skills, particularly for training roles.</td>
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<td>Animal Assisted Therapy</td>
<td>Grooming facilities</td>
<td>Animal assisted therapy opportunities are typically volunteer. Seek trainer/pet handling courses through organizations such as Delta Society.</td>
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<td>Rescue organizations</td>
<td>Research post-graduate certification via the American Association for Laboratory Animal Science (AALAS) for laboratory animal care positions.</td>
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<td>Humane societies</td>
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<td>City/county animal control organizations</td>
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<td>Breed organizations</td>
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<td>Veterinary practices</td>
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<td>Stables</td>
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<td>Zoos</td>
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<td>Research facilities</td>
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GENERAL INFORMATION AND STRATEGIES

• As an undergraduate, seek laboratory experiences such as research projects, volunteering with professors, summer jobs or internships.
• Participate in research programs and internships sponsored by government organizations and private corporations.
• Consider a veterinary technician or technologist program accredited by the American Veterinary medical Association (AVMA) or a specialized master’s program to qualify for research technician positions.
• Earn master’s degree for greater variety and autonomy on the job. Earn a Ph.D. to work on high-level research projects, to direct research programs, to enter high levels of administration, and to teach at four-year post-secondary institutions. Postdoctoral fellowships may also be required.
• Learn to work independently and as part of a team.
• Combine an undergraduate degree with a degree in law, business, education, communication and information science, or other discipline to expand career opportunities.
• Consider earning an MBA after gaining work experience to reach the highest levels of agribusiness management.
• The animal sciences are good preparation for a career in healthcare such as medicine, dentistry, pharmacology, and veterinary science, but professional degrees and licenses are also necessary to practice in these fields. Become familiar with the specific entrance exam for graduate or professional schools in your area of interest.
• Join professional associations and community organizations and read related journals to stay abreast of current issues in the field and to develop networking contacts.
• Actively participate in student organizations, competition teams and other related activities.
• Secure strong relationships and personal recommendations from professors and/or employers.
• Learn federal, state and local government job application processes. The federal government is the largest employer of scientists.
• Gain experience with grant writing and fundraising techniques. Often research must be funded in this manner.