Bachelor of Science in Agriculture

Murray State University offers career preparation in Animal Technology and Agricultural Science areas.

Career Outlook

The field of agriculture includes a very broad range of career fields. Some of the areas include agronomy, animal science, equine science, horticulture, engineering/mechanization, communication, precision agriculture, veterinary medicine, education and business. Job opportunities are numerous, and agriculture graduates are in high demand. A brief list of agricultural positions might include plant breeder, soil scientist, soil conservationist, extension agent, sales representative, banker, teacher, nursery specialist, landscape designer, greenhouse manager, farmer, animal nutritionist, animal breeder, economist, forester, processor, veterinary technician and veterinarian. Starting salaries for a B.S. graduate are very competitive with other academic disciplines.

Specialization Options

The Hutson School of Agriculture offers undergraduate and graduate curriculums leading to degrees by specializing in:

- **Department of Agricultural Science**
  - Agronomy
    - Sales/Production Emphasis
    - Research Emphasis
    - Practicum Emphasis
  - Agribusiness Economics
    - Crop Production Emphasis
    - Entrepreneurship Emphasis
    - Marketing/Management Emphasis
    - Global Emphasis
  - Agricultural Education
  - Agricultural Systems Technology
  - Horticulture
  - Agriscience Technology
    - Communications Emphasis
    - Agriculture Public Service Emphasis
    - Leadership Emphasis
    - Agricultural Technology Emphasis
    - Emerging Technology
    - Environmental/Health Emphasis

- **Department of Animal and Equine Science**
  - Animal/Equine Science
    - Food Animal Emphasis
    - Equine Management Emphasis
    - Equine Science Emphasis
  - Pre-Veterinary Medicine
  - Veterinary Technology
    - Veterinary Technology Emphasis
    - Zoology Animal Health Technology Emphasis
  - Pre-Veterinary Medicine

Facilities

Hutson School of Agriculture facilities include classrooms, laboratories and offices housed in the south wing of the Oakley Applied Science Building, A. Carman Animal Health Technology Center, E.B. Howton Agricultural Engineering Building, Equine Instructional Facility, greenhouses and four farm complexes located near campus.

The equine, beef, swine, small animal and aquaculture facilities are a part of the farm-laboratory complex. The Wm. Bill Cherry Agricultural Exposition Center is utilized for field days, judging contests, clinics and numerous other activities.

Organizations

- Agriculture Leadership Council
- Alpha Gamma Rho
- Agriculture Ambassadors
- Agribusiness Club
- Agricultural Engineering Technology Club
- Agronomy Club
- Alpha Zeta
- Block and Bridle
- Collegiate FFA
- Collegiate Farm Bureau
- Collegiate 4-H
- Crops Judging Team
- Dressage Club
- Equestrian Team
- Horsemans’s Association
- Horticulture Club
- Swine Club
- Rodeo Team/Club
- Soil Judging Team
- Sigma Alpha
- Veterinary Technology/Pre-Vet Club

For More Information Contact

Recruitment Coordinator
Murray State University
Hutson School of Agriculture
(270) 809-3329
msu.ag@murraystate.edu
www.murraystate.edu/agr
Bachelor of Science Degree - Courses of Study

General Agriculture

AGR 101T Transitions
AGR 105 Introduction to Rodeo
AGR 133 Field Applications for Agriculture
AGR 199 Contemporary Issues in Agriculture
AGR 200 International Agriculture Experience
AGR 339 Computer Applications for Agriculture
AGR 353 Work, Food, Agriculture and Society
AGR 383 Disseminating Ag, Food, and Natural Resources through Emerging Media
AGR 399 Professional Development Seminar I
AGR 435 Interpretation of Agricultural Research
AGR 436 Undergraduate Research in Agriculture
AGR 437 Senior Honors Thesis
AGR 439 Software Applications in Agriculture
AGR 471 Applications in Precision Agriculture
AGR 488 Cooperative Education/Internship
AGR 489 Cooperative Education/Internship
AGR 499 Leadership/Professional Development Seminar II
AGR 533 Seminar in International Agriculture Systems
AGR 538 Seminar in Production Agricultural Systems
AGR 539 Advanced Computer Applications for Agriculture
AGR 551 Selected Studies in Agriculture
AGR 571 Advanced Livestock Judging
AGR 585 Specialized Journalism/RTV
AGR 586 Training & Presentation Development Strategies for Agricultural Audiences
AGR 599 Agriculture Senior Capstone

Agricultural Education

AED 104 Agricultural Education, Leadership and Life Knowledge
AED 250 Special Problems in Agricultural Education
AED 380 Agricultural Education, Extension & Leadership
AED 421 Student Teaching in Agricultural Education
AED 501 Methods in Teaching Agricultural Education
AED 582 Supervision in Agricultural Education
AED 593 Practicum in Ag Ed, Extension & Public Svc Leadership

Equine Science

AGR 101 Basic Stock Seat Horsemanship
AGR 102 Beginning Equitation 1
AGR 103 Intermediate Hunt Seat Equitation
AGR 104 Advanced Hunt Seat Equitation
AGR 106 Beginning Equitation 2
AGR 107 Intermediate Stock Seat Equitation
AGR 108 Advanced Stock Seat Equitation
AGR 109 Beginning Horsemanship Experience
AGR 110 Livestock Events Production & Venue Management
AGR 111 Basic Forward Seat Equitation
AGR 201 Intermediate Horsemanship
AGR 302 Horse Science
AGR 303 Advanced Horse Science
AGR 304 Advanced Stock Seat
AGR 305 Advanced Forward Seat
AGR 308 Applied Equine Management
AGR 309 Equine Facilities Management
AGR 315 Equine Exercise Physiology
AGR 317 Equine Health Care and Management
AGR 318 Equine Forage Management
AGR 319 Equine Nutrition and Feeding
AGR 401 Equine Breeding Management
AGR 403 Equine Reproduction
AGR 404 Selective Equine Breeding
AGR 405 Equine Behavior Modification
AGR 407 Equine Selection and Evaluation
AGR 408 Equine Wilderness Studies
AGR 497 Advanced Practicum in Equine Management
AGR 514 Teaching Methods in Equine Science

Animal Technology

AGR 100 Animal Science
AGR 182 Introduction to Veterinary Science
AGR 223 Introduction to Artificial Insemination for Cattle
AGR 300 Principles of Animal Nutrition and Ration Formulation
AGR 301 Livestock Judging and Evaluation
AGR 310 Applications in Animal Technology
AGR 311 Beef Science
AGR 312 Dairy Science
AGR 313 Livestock Production Management Systems
AGR 314 Small Ruminant Science
AGR 316 Dairy Cattle Selection and Evaluation
AGR 320 Livestock Behavioral Analysis
AGR 321 Production Systems
AGR 322 Introductory Veterinary Laboratory I
AGR 324 Veterinary Diagnostic Imaging
AGR 325 Small Animal Science
AGR 326 Swine Science
AGR 329 Introductory Veterinary Laboratory II
AGR 331 Small Animal Diseases
AGR 332 Veterinary Nursing
AGR 340 Veterinary Laboratory Sciences
AGR 375 Animal Emergency Preparedness
AGR 380 Veterinary Laboratory Rotation
AGR 400 Veterinary Microbiology
AGR 402 Advanced Livestock Judging
AGR 410 Advanced Veterinary Hematology
AGR 420 Veterinary Clinical Chemistry
AGR 423 Artificial Insemination Techniques for Cattle
AGR 426 Experience in Swine Production
AGR 430 Veterinary Parasitology
AGR 440 Behavior Modification Techniques for Domestic Animals
AGR 441 Principles of Animal Learning
AGR 444 Purchased Livestock Management and Marketing
AGR 460 Advanced Nutrition
AGR 503 Genetics and Animal Breeding
AGR 504 Diseases of Livestock

Animal Technology - Continued

AGR 505 Forage Management Systems
AGR 506 Reproductive Physiology
AGR 510 Animal Anatomy and Physiology
AGR 511 Animal Anatomy and Physiology Laboratory
AGR 512 Beef Cattle Management Systems
AGR 540 Veterinary Surgery and Anesthesia
AGR 550 Applied Pharmacology
AGR 560 Advanced Veterinary Surgery and Anesthesia
AGR 580 Veterinary Products
AGR 582 Veterinary Practice and Operations
AGR 583 Veterinary Law and Ethics
AGR 590 Internship in Animal Technology

Agricultural Systems Technology

AGR 170 Introduction to Agricultural Systems Technology
AGR 371 Agricultural Buildings and Construction
AGR 372 Agricultural Post Processing Systems
AGR 377 Agriculture Safety
AGR 378 Agricultural Environmental Management Systems
AGR 379 Field Equipment Technology Management
AGR 438 Seminar in Agricultural Systems
AGR 470 Soil and Water Engineering
AGR 477 Agricultural Power Units
AGR 570 Agricultural Systems Technology Laboratory Management
AGR 572 Advanced Metal Work
AGR 573 Agricultural Processing Systems
AGR 574 Agricultural Irrigation and Water Systems
AGR 575 Combin and Grain Handling Systems
AGR 576 Agricultural Electrification Systems
AGR 577 Tractor Power Principles
AGR 578 Research and Development of Agricultural Tractors and Equipment

Agronomy

AGR 247 Tobacco Production
AGR 341 Seed Production and Technology
AGR 342 Seed, Crop & Grain Analysis
AGR 345 Soil Science
AGR 346 Soil Science Laboratory
AGR 350 Soil Survey
AGR 355 Soil Judging
AGR 376 Agricultural Chemicals
AGR 455 Soil Management
AGR 470 Soil and Water Engineering
AGR 498 Agronomy Practicum
AGR 541 Crop Physiology
AGR 546 Integrated Pest Management
AGR 547 Crop Management
AGR 549 Weeds and Their Control
AGR 554 Soil and Plant Analysis
AGR 555 Advanced Soil Fertility
AGR 561 Sustainable Agriculture
AGR 562 Principles of Agroecology