

NDSU

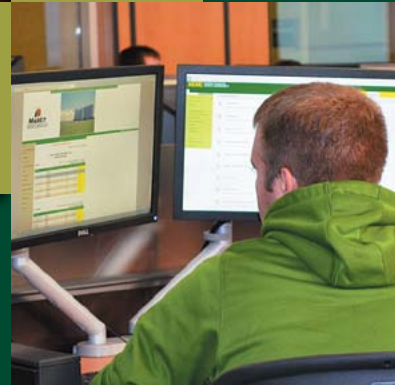
College of Agriculture, Food Systems, and Natural Resources

NORTH DAKOTA STATE UNIVERSITY, FARGO ND



20 academic
programs

hundreds of
careers



limitless
opportunity



NDSU

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After obtaining a degree from NDSU's College of Agriculture, Food Systems, and Natural Resources, you will be limited only by your imagination. Our graduates become doctors, foresters, geneticists, economists ... They shape public policy and help people and communities prosper.

Today, graduates of our college
are working to:

Conduct
scientific
research

Design and
test machines
and buildings

Protect
natural
resources

Produce
and distribute
food and
fiber

Help people
and
communities
prosper

Grow
and nurture
plants

Discover new
scientific
knowledge

Help businesses
develop,
promote and
market products
and services

Study
and care for
animals

Expert instruction, state-of-the-art facilities and hands-on teaching methods help prepare our graduates for the career and future they want.

We can do the same for you.

Read on to see what career options may appeal to you.

Career Options

Protecting the environment

- Agricultural Engineer
- Aquaculturist
- Biochemist
- Conservation Officer
- Entomologist
- Environmental Consultant
- Environmental Educator
- Environmental Engineer
- Environmental Technician
- Fisheries Technician
- Fish and Wildlife Specialist
- Forester
- Horticulturist
- Hydrologist
- Microbiologist
- Natural Resources Technician
- Nature Interpreter
- Park Ranger
- Soil and Water Engineer
- Soil Chemist
- Soil Conservationist
- Soil Scientist
- Waste Management Specialist
- Wetland Scientist
- Wildlife Rehabilitator
- Wildlife Technician

Working with food

- Chemist
- Dairy Quality Assurance Officer
- Food Broker
- Food Sales Representative
- Food Scientist
- Food Technologist
- Grain Merchandiser
- Horticulturist
- Labeling Specialist
- Meat Quality Assurance Officer
- Microbiologist
- Nutritionist
- Processing Plant Manager
- Quality Control Manager
- Recipe Modification Specialist
- Sensory Analyst

Working in health professions

- Biochemist
- Chemist
- Doctor
- Geneticist
- Medical Technologist
- Microbiologist
- Nurse
- Nutritionist
- Pharmacist
- Physical Therapist
- Veterinarian
- Veterinary Technician

Working in business

- Accountant
- Advertising Agent
- Ag Loan Officer
- Agribusiness Manager
- Agricultural Salesperson
- Business Manager
- Commodity Broker
- Computer Systems Analyst
- Credit Analyst
- Economist
- Export Marketer
- Extension Specialist
- Farm Management Consultant
- Financial Analyst
- Food Broker
- Food Inspector
- Food Sales Representative
- Grain Merchandiser
- Horticulturist
- Insurance Agent
- Lawyer
- Livestock Buyer
- Livestock Production Specialist
- Market Analyst
- Marketing Manager
- Public Relations Specialist
- Quality Control Specialist
- Real Estate Appraiser
- Retail Manager
- Rural Development Specialist
- Sales Representative
- Securities Broker
- Technical Service Representative
- Wholesale Manager



Career Options

Working with plants

- Agronomist
- Biochemist
- Chemist
- Crop Scout
- Crop Utilization Specialist
- Entomologist
- Forester
- Fruit Grower
- Geneticist
- Grain Farmer
- Horticulturist
- Microbiologist
- Pest Management Specialist
- Plant Breeder
- Plant Ecologist
- Plant Pathologist
- Plant Physiologist
- Seed Production Specialist
- Seed Scientist
- Turfgrass Specialist
- Weed Scientist

Working in science

- Agronomist
- Animal Ecologist
- Animal Nutritionist
- Animal Scientist
- Aquaculturist
- Biochemist
- Chemist
- Doctor
- Entomologist
- Environmental Engineer
- Environmental Technician
- Fisheries Technician
- Fish and Wildlife Specialist
- Food Scientist
- Food Technologist
- Forester
- Geneticist
- Horticulturist
- Hydrologist
- Microbiologist
- Natural Resources Technician
- Nutritionist
- Ornithologist
- Plant Breeder
- Plant Ecologist
- Plant Pathologist
- Plant Physiologist
- Science Writer
- Seed Scientist
- Soil and Water Engineer
- Soil Scientist
- Veterinarian
- Veterinary Technician
- Weed Scientist
- Wetland Scientist
- Wildlife Technician

Working with people

- Advertising Executive
- Agricultural Educator
- Agricultural Journalist
- Broadcaster
- Communication Specialist
- Copywriter
- Doctor
- Economist
- Editor
- Extension Specialist
- Farm Management Consultant
- Horticulturist
- Lawyer
- Market Analyst
- Marketing Manager
- Nutritionist
- Park Ranger
- Public Administration Specialist
- Public Policy Analyst
- Public Relations Specialist
- Rural Development Specialist
- Rural Sociologist
- Sales Representative
- Science Writer
- Veterinary Technician
- Videographer

Working with animals

- Animal Ecologist
- Animal Nutritionist
- Animal Scientist
- Aquaculturist
- Biochemist
- Chemist
- Dairy Farmer
- Entomologist
- Fisheries Technician
- Geneticist
- Kennel Manager
- Livestock Producer
- Livestock Product Sales
- Microbiologist
- Nutrition Consultant
- Ornithologist
- Stable Manager
- Veterinarian
- Veterinary Technician
- Wildlife Rehabilitator
- Wildlife Technician
- Zoo Keeper



Academic Programs

Opportunities abound as you check out the undergraduate academic programs offered through the College of Agriculture, Food Systems, and Natural Resources.

These programs are the first step toward getting the career you want.

After reading the information, feel free to discuss the program with an adviser in that field. They will be happy to answer your questions and get you started on the right track.

AGRIBUSINESS prepares students to manage agricultural and agriculture-related businesses. The major offers training in finance, management, marketing and policy/trade in agriculture and food systems.

Shelly Swandal (701) 231-7442
shelly.swandal@ndsu.edu

AGRICULTURAL ECONOMICS focuses on the business aspects of agriculture — marketing, management and finance.

Shelly Swandal (701) 231-7442
shelly.swandal@ndsu.edu



AGRICULTURAL SYSTEMS MANAGEMENT teaches students the skills to market, select and service technical equipment and facilities for producing, handling, storing and distributing agricultural products (food, feed, fiber, renewable fuels) and for resource management (irrigation, water conservation, erosion control, agricultural data processing systems).

Lori Buckhouse (701) 231-7273
lori.buckhouse@ndsu.edu

ANIMAL SCIENCE encompasses the biological principles, management practices and business concepts that pertain to all managed animals including livestock and animal products and the ecological relationships between livestock and the environment.

Marc Bauer (701) 231-7691
marc.bauer@ndsu.edu

BIOTECHNOLOGY combines biology, biochemistry, genetics and new technologies to prepare students to produce plants, animals and microorganisms with improved characteristics; use DNA for gene cloning and transfer among organisms; and develop pharmaceuticals, disease tests, feed additives, enzymes and hormones.

Gene Berry (701) 231-7520
eugene.berry@ndsu.edu

Academic Programs

CROP AND WEED SCIENCES teaches students about scientific methods of improving and protecting grain and forage crops to increase food production through genetics, weed control, plant breeding and biotechnology.

Kirk Howatt (701) 231-7209
kirk.howatt@ndsu.edu

ECONOMICS focuses on the production, distribution and consumption of goods and services, theories and management of economic systems and issues such as globalization, employment, economic growth, natural resource management and market regulation.

Shelly Swandal (701) 231-7442
shelly.swandal@ndsu.edu

EQUINE SCIENCES teaches students to care for horses and horse equipment; ride and drive horses for leisure, sport, show and professional purposes; and train horses and riders. It includes courses on nutrition, health, safety, business concepts and management practices.

Carrie Hammer (701) 231-5682
carrie.hammer@ndsu.edu

FOOD SAFETY teaches students about the causes of foodborne illnesses, disease outbreak issues, the regulations governing food processing and how to reduce the potential for food contamination.

Cliff Hall (701) 231-6359
clifford.hall@ndsu.edu

FOOD SCIENCE is the study of the biology, chemistry and technology to convert raw agricultural products into processed foods that are convenient to use, safe and nutritious and taste good.

Cliff Hall (701) 231-6359
clifford.hall@ndsu.edu

GENERAL AGRICULTURE provides a broad background in agriculture for students who are exploring majors in the field and those who need a general education in agriculture and want to develop a study program to meet specific career goals.

David Buchanan (701) 231-7426
david.s.buchanan@ndsu.edu

HORTICULTURE teaches students about the scientific methods of improving vegetables, fruit, flowers and ornamentals and increasing their usefulness for food production and beautification.

Harlene Hatterman-Valenti (701) 231-8536
h.hatterman.valenti@ndsu.edu

MICROBIOLOGY is the study of bacteria, viruses and other microbes that are important to animal and human health, the environment, food technology and safety, and the biotechnology industry.

Charlene Wolf-Hall (701) 231-6387
charlene.hall@ndsu.edu



Academic Programs

NATURAL RESOURCES MANAGEMENT provides students with a broad background in biological, social and physical/earth sciences, which prepares them to manage and protect the Earth's natural resources and ecosystems.

Shawn DeKeyser (701) 231-7868
edward.dekeyser@ndsu.edu

PRE-AGRICULTURAL EDUCATION allows students to complete preparatory work for a degree in agricultural education.

Brent Young (701) 231-7439
brent.young@ndsu.edu

PRE-VETERINARY MEDICINE allows students to complete all the requirements they need to be admitted to any veterinary college in the U.S., Canada and some foreign countries.

Neil Dyer (701) 231-7521
neil.dyer@ndsu.edu

RANGE SCIENCE teaches the conservation and management of sustainable ecosystems for livestock and wildlife production, as well as for clean water, recreation and aesthetic purposes.

Shawn DeKeyser (701) 231-7868
edward.dekeyser@ndsu.edu

SOIL SCIENCE teaches students about soil classification, soil properties and the soil's importance in the growth of agricultural crops and other plants and as a filter for water quality.

Tom DeSutter (701) 231-8901
thomas.desutter@ndsu.edu

SPORTS AND URBAN TURFGRASS MANAGEMENT teaches students the skills to manage turfgrass in home lawns, parks, golf courses and other sports facilities. It focuses on turfgrass selection, soil characteristics and preparation, irrigation practices and pest control.

Deying Li (701) 231-8037
deying.li@ndsu.edu

VETERINARY TECHNOLOGY provides classroom instruction, clinical experience and a professional internship that prepares students for a career in animal health care.

Stacey Ostby (701) 231-7742
stacey.ostby@ndsu.edu

For more information about the academic programs listed above, visit the Web at www.ndsu.edu/majors.

Additional Opportunities

A major in agricultural communication is available through the NDSU College of Arts, Humanities and Social Sciences.
A major in agricultural education is available through the NDSU College of Human Development and Education.
A major in agricultural engineering is available through the NDSU College of Engineering and Architecture.

Graduate Study

Opportunities to study for a master's or doctoral degree are available in many of the programs included in this booklet as well as cellular and molecular biology, cereal science, entomology, genomics and bioinformatics, international agribusiness, molecular pathogenesis, plant sciences and plant pathology.

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For more information:

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20 academic programs

hundreds of careers



limitless opportunity

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