

Critical Foundation Knowledge and Skills Identified by Employers

Problem Solving - Ethics
 Critical Thinking - Integrity
 Teamwork - Technology Application
 Safety, Health, & Environment
 Organizational & Global Systems
 Leadership - Cultural Competence
 Lifelong Learning - Creativity
 Communication
 Innovation

Agribusiness Systems

- Agricultural Science
- Law / Regulation / Compliance
- Agribusiness Management
- Agricultural Education
- Sales / Marketing
- Accounting / Finance / Insurance

Product Demonstrator - \$30,000 - \$39,000
 Application Support Specialist - \$50,000 - \$70,000
 Agronomy Location Manager - \$61,000 - \$95,000
 Service Coordinator / Customer Service Manager - \$52,000 - \$70,000
 Marketing/Product Manager - \$110,000 - \$165,000
 The median advertised salary in Minnesota for agribusiness occupations is about \$77,000.

Pathway Description

Coordinate activities that contribute to the production, processing and distribution of agricultural commodities and resources, promote agricultural products, and help finance agricultural businesses.

Natural Resources Systems

- Forestry
- Wildlife Ecology
- Urban Forestry
- Land Surveying / Geospatial Analysis
- Forestry / Natural Resources
- Natural Resources Law Enforcement

Environmental Maintenance Technician - \$49,000 - \$62,000
 Conservation Technician - \$36,000 - \$47,000
 Land Surveyor - \$55,000 - \$85,000
 Parks Construction Supervisor - \$65,000 - \$87,000
 Environmental Coordinator - \$80,000 - \$109,000
 The median advertised salary in Minnesota for natural resource system occupations is about \$60,500.

Pathway Description

Protect natural resources, develop, maintain and manage forests and rangelands, catch and trap marine life, work at recreational sites, provide habitats for wildlife.

Power, Structural and Technical Systems

- Robotics / UAS / UAV Technology
- Power Systems / Wind and Solar Energy
- Welding and Fabrication
- Applied Engineering / Drafting
- Precision Agriculture / GIS / GPS
- Diesel / Heavy Equipment Mechanics

Plant Maintenance Technician - \$48,000 - \$62,000
 Quality Assurance Technician - \$37,000 - \$44,000
 Nuclear Interface Transmission Coordinator - \$50,000 - \$75,000
 Wind Turbine Technician - \$46,000 - \$65,000
 Wind/Solar Collections Engineer - \$98,000 - \$119,000
 The median advertised salary in Minnesota for power, structural, and technical system occupations is about \$72,000.

Pathway Description

Apply engineering, hydraulics, pneumatics, electronics, power structures and controls to farming, design agricultural structures, design machinery and equipment, conserve soil and water for farms, and improve processing of agricultural products.

Biotechnology

- Biotechnology
- Biotics
- Genetics
- Physics
- Life Science / Evolutionary Biology
- Ecology

Chief System Operator - \$99,000 - \$120,000
 Lab Animal Research Technician - \$48,000 - \$69,000
 Wet Chemical Analyst / Lab Technician - \$40,000 - \$53,000
 Chemical Plant Operator - \$40,000 - \$50,000
 The median advertised salary in Minnesota for biotechnology system occupations is about \$65,000.
 (Poultry, Swine, Dairy) Animal Technician - \$40,000 - \$50,000
 The median advertised salary in Minnesota for biotechnology products or organisms, improve plants or animals, or develop microorganisms for specific agricultural uses.

Pathway Description

Make use of a range of tools, including breeding techniques, to make or modify products or organisms, improve plants or animals, or develop microorganisms for specific agricultural uses.

Environmental Systems

- Hydrology
- Soil Science
- Meteorology
- Environmental Science
- Law / Regulation / Compliance
- Aquatic Biology

Environmental Waste Chemist - \$45,000 - \$59,000
 Water Treatment Technician - \$33,000 - \$48,000
 Environmental Engineer - \$84,000 - \$123,000
 Environmental Regulatory Compliance Specialist - \$78,000 - \$109,000
 Managers of Agricultural Construction Services - \$86,000 - \$113,000
 The median advertised salary in Minnesota for environmental service system occupations is about \$94,000.
 Manage recycling operations, control water and air pollution, and dispose of waste to address public health issues, develop regulations to prevent environmental mishaps, analyze and research environmental projects.

Food and Processing Systems

- Culinary Arts / Food Science
- Data Management
- Accounting / Finance
- Food Processing / Safety
- Food Service Management
- Quality Control / Quality Assurance

Grain Production Supervisor - \$50,000 - \$76,000
 Grain Facility Maintenance Mechanic - \$45,000 - \$60,000
 Food Process Engineer - \$107,000 - \$139,000
 Quality Assurance Specialist - \$59,000 - \$82,000
 Grain Production Operations Manager - \$48,000 - \$72,000
 The median advertised salary in Minnesota for food system occupations is about \$49,000.
 Discover new food sources, analyze new food products, develop ways to process, preserve, package or store food, create new food products, inspect food processing areas.

Plant Systems

- Agronomy
- Plant Science / Genetics
- Commodity Marketing
- Grounds Management
- Horticulture / Green House Management
- Landscape Design / Construction / Technology

Agricultural Field Service Technician - \$41,000 - \$51,000
 Pilot Plant Technologist - \$88,000 - \$130,000
 Arborist / Tree Worker - \$48,000 - \$63,000
 Groundskeeper - \$32,000 - \$40,000
 Agricultural Equipment Operator - \$41,000 - \$55,000
 The median advertised salary in Minnesota for plant system occupations is about \$48,000.

Pathway Description

Study plants and their growth, use genetic engineering to improve crops, develop ways to improve seeds.

Animal Systems

- Animal Medicine
- Equine Science
- Animal Science
- Biology
- Aquaculture
- Dairy / Lamb / Poultry / Swine Management

Veterinarian - \$80,000 - \$103,000
 Animal Caretaker - \$32,000 - \$36,000
 Small Animal Technician - \$42,000 - \$55,000
 Animal Breeding Technician - \$39,000 - \$52,000
 Lab Animal Technician - \$50,000 - \$58,000
 The median advertised salary in Minnesota for animal system occupations is about \$54,000.
 Develop new ways of producing and processing meat, poultry, eggs and dairy products, study genetics, nutrition, reproduction, growth and development of domesticated farm animals, inspect and grade livestock food products, purchase livestock, work in technical sales or marketing of livestock.