

Agriculture

The Agriculture major focuses on the study of food production, natural resource management, and agricultural systems. Students learn about crop and livestock production, soil science, agricultural economics, and sustainability practices. This major prepares graduates to address global challenges related to food security, environmental sustainability, and rural development. Typical industry sectors include farming and ranching, agricultural technology, food production and distribution, environmental consulting, government agencies, and agribusiness.

Job Title Examples:

- Agricultural Technician
- Farm Manager
- Agricultural Sales Representative
- Crop Consultant
- Sustainability Coordinator
- Soil Scientist
- Livestock Specialist
- Food Safety Inspector
- Agribusiness Analyst
- Environmental Compliance Officer

Hard and Soft Skills Needed:

Hard Skills:

1. Agricultural Equipment Operation
2. Soil and Crop Management
3. Agricultural Economics
4. Data Analysis and Statistical Software
5. Irrigation System Design

Soft Skills:

1. Problem-Solving
2. Communication
3. Teamwork
4. Time Management
5. Adaptability

Further Education/Training Required and/or Suggested:

A BS in Agriculture prepares students for various entry-level roles, but additional training or certifications may be needed depending on the specialization and career goals:

To Enter the Field:

1. Specialized Certifications:
 - Pesticide Applicator License for roles in crop management.
 - Certified Crop Advisor (CCA) for agronomy-related positions.
2. Practical Experience: Internships or hands-on training in farming, agribusiness, or related fields.

To Advance:

1. Professional Certifications:
 - Certified Professional Agronomist (CPAg) or Soil Scientist Certification for advanced technical roles.
 - Livestock certifications for those in animal science.
2. Graduate Studies:
 - An MS or MBA for leadership or research-oriented roles.

Summary:

While entry-level roles often don't require certifications, additional training in areas like agronomy, livestock management, or agribusiness enhances advancement opportunities.

Professional or Student Associations:

- American Society of Agronomy (ASA)
- National FFA Organization
- American Farm Bureau Federation (AFBF)
- Soil Science Society of America (SSSA)
- International Society for Horticultural Science (ISHS)