

Career Opportunities

Only 10 percent of the more than 20 million people who work in the agriculture field are farmers. The rest are employed in more than 200 agriculture-related careers. Agriculture is science-based, high-tech, and business oriented. The discipline is “hands-on” and offers a breadth of study and career possibilities. Research careers in areas such as Biochemistry, Microbiology, Biotechnology, Botany, and Zoology are available, as well as careers in: Agritourism, Food Science, Education and Research, Animal Care, Engineering, Genetics, Business Management, Entrepreneurship, Manufacturing, Community Development, Environmental Conservation, Advertising & Marketing, Plant Production, Food Production, Economics, Agronomy, Entomology, along with many others.

- *Business Management* is a major component of agriculture. It includes careers related to the transport, processing, delivery and marketing of food to consumers. It also includes the seed, fertilizer and equipment services for people who produce food, fiber, and renewable energy.
- *Biotechnology* produces new and enhanced forms of field crops and farm animals.
- *Economics* offers information on economic trends with reference to agriculture and other economic contexts. Much of the work involves advising agricultural businesses on ways of improving management and profits.
- *Education and Research* involves teaching subjects such as forestry, horticulture and animal science in school and college settings as well as working for government agencies that provide consulting and educational services to agriculture professionals.
- *Engineers* design equipment to enhance the production of foods for both human and animal consumption in addition to developing equipment to produce pharmaceuticals.
- *Entomology* is the study of insects. Related to agriculture, this involves a variety of jobs that include insect surveys, pest management, the study of disease carrying insects, and raising bees.
- *Food Production* is the business and science of producing, processing and distributing safe and healthy food products.

Monroe Community College offers Agriculture and Food Studies Certificate

The certificate offers students the fundamental knowledge and skills required to perform tasks and responsibilities that support the agricultural and food related industry from farm to fork. Tasks and responsibilities include food quality, food safety, supervision, communication, inventory management, documentation, team skills, and problem-solving skills.

Visit the MCC [Agriculture & Life Sciences Institute](#) website for more information.

Degrees and General Coursework

Many careers in agriculture require a bachelor’s degree in the particular field. SUNY colleges, such as Alfred State, Cobleskill and Morrisville, do offer two-year degrees in some agricultural disciplines. Although all agriculture related majors require courses in math and science, the number and level of such courses is contingent on the specific major chosen.

Transfer Information

- Cornell University College of Agriculture and Life Sciences (CALS) is world renowned for their academic programs related to the field of agriculture. Basic coursework at MCC necessary to transfer to CALS for majors in Agricultural Sciences, International Agricultural and Rural Development, Animal Science and Agricultural Science Education includes: ENG 101, ENG 200, SPC 142, BIO 155 and BIO 156, MTH 160 and/or MTH 210, CHE 151 and 152, and Social Science courses such as SOC and PSY 101. For specific requirements, see [Cornell College of Agriculture and Life Sciences Transfer Application Requirements](#).
- SUNY College of Environmental Science and Forestry offers a variety of academic programs focused on the science, design, engineering and management of natural resources and the environment. Majors range from Aquatics & Fisheries Science to Forest Ecosystems Science to Natural Resource Management. Most majors require students to take BIO 116, 155, 156, CHE 151, 152, MTH 210, 211 and a Physics sequence. Some also require CHE 251 & 252 as well as other specific courses designed to meet program requirements. For specific MCC courses, see [SUNY ESF website - Cooperative Colleges](#).
- SUNY Alfred State offers A.A.S. degrees in Agricultural Technology (includes concentrations in Animal/Dairy Science and Plant Science), Agricultural Business, and Veterinary Technology.
- SUNY Cobleskill offers Bachelor's degrees in Agricultural Business Management, Agricultural Biotechnology, Animal Science, Agriculture Equipment Technology, Fisheries and Aquaculture, Plant Science, and Wildlife Management.
- SUNY Morrisville Bachelors of Technology degrees are available in the disciplines of Dairy Management, Equine Science, and Horticulture Business Management. The college also offers a B.B.A. Degree in Agriculture Business Development. Courses taken are contingent on the major chosen by the student.

Additional Information

The Cooperative Extension System is a nationwide, non-credit educational network. Each U.S. state and territory has a state office at its land-grant university and a network of local or regional offices. For more information, visit [Cooperative Extension System](#).

- [USDL, Career Guide to Industries, Agriculture, Forestry, and Fishing](#)
- [United States Department of Agriculture](#)
- [National Association of Agriculture Educators](#)
- [National Future Farmers of America](#)

Note: While every effort is made to ensure that the information in this guide is accurate, students are advised to contact transfer institutions for specific course requirements and the most up-to-date information.