

Industry Credentials, Concentration Sequences, and Career Clusters

Biotechnology Foundations in Agricultural and Environmental Science (8085)

Industry Credentials:

These apply only to 36-week courses.

- Agricultural Biotechnology Assessment
- Animal Systems Assessment
- Biotechnology Assessment
- College and Work Readiness Assessment (CWRA+)
- Customer Service Specialist (CSS) Examination
- Natural Resources Systems Assessment
- Production Agriculture Assessment

Concentration Sequences:

*A combination of this course and those below, equivalent to two 36-week courses, is a **concentration sequence**. A **program completer** is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses based on their career pathways.*

- Applied Agricultural Concepts (8072/18 weeks)
- Applied Agricultural Concepts (8073/36 weeks)
- Biological Applications in Agriculture (8086/36 weeks)
- Biomedical Engineering (8467/36 weeks)
- Biomedical Technician (8347/36 weeks)
- Biotechnology Applications in Agriculture (8087/36 weeks)
- Ecology and Environmental Management (8046/36 weeks)
- Ecology and Environmental Management (8045/18 weeks)
- Equine Science (8015/18 weeks)
- Equine Science (8080/36 weeks)
- Equine Science, Advanced (8094/36 weeks)
- Fisheries and Wildlife Management (8041/36 weeks)
- Food Science and Dietetics (8239/36 weeks)
- Forensic Technology (8409/36 weeks)
- Forestry Management (8042/36 weeks)
- Forestry Management, Advanced (8044/36 weeks)

- Foundations of Agriculture, Food, and Natural Resources (8006/36 weeks)
- Greenhouse Plant Production and Management (8035/36 weeks)
- Horticulture Sciences (8034/36 weeks)
- Introduction to Animal Systems (8008/36 weeks)
- Introduction to Natural Resources and Ecology Systems (8040/36 weeks)
- Introduction to Plant Systems (8007/36 weeks)
- Medical Laboratory Technology I (8377/36 weeks)
- Medical Laboratory Technology II (8378/36 weeks)
- Small Animal Care I (8081/18 weeks)
- Small Animal Care I (8083/36 weeks)
- Small Animal Care II (8084/36 weeks)
- Veterinary Science I (8088/36 weeks, 140 hours)
- Veterinary Science II (8089/36 weeks, 140 hours)

Career Clusters, Career Pathways, and Occupations:

- Agriculture, Food and Natural Resources
 - Animal Systems
 - Animal Breeder, Husbandry
 - Animal Geneticist
 - Animal Scientist
 - Aquacultural Manager
 - Environmental Service Systems
 - Environmental Compliance Inspector
 - Environmental Sampling and Analysis Technician
 - Toxicologist
 - Food Products and Processing Systems
 - Biochemist
 - Food Scientist
 - Natural Resources Systems
 - Ecologist
 - Fisheries Technician
 - Forest Technician
 - Microbiologist
 - Plant Systems
 - Botanist
 - Certified Crop Advisor
 - Crop Grower
 - Forest Geneticist
 - Ornamental Horticulturist
 - Plant Breeder/ Geneticist
 - Soil and Plant Scientist
 - Tree Surgeon
 - Power, Structural, and Technical Systems
 - Agricultural Engineer
- Health Science

- Biotechnology Research and Development
 - Biochemist
 - Cell Biologist
 - Research Assistant
- Diagnostics Services
 - Cardiovascular Technologist
 - Computer Tomography (CT) Technologist
 - Medical, Clinical Laboratory Technician
 - Radiologic Technologist, Radiographer
- Health Informatics
 - Epidemiologist
- Support Services
 - Environmental Sampling and Analysis Technician
 - Medical, Clinical Laboratory Technologist
- Science, Technology, Engineering and Mathematics
 - Engineering and Technology
 - Agricultural Engineer
 - Biomedical Engineer
 - Environmental Engineer
 - Petroleum Engineer
 - Science and Mathematics
 - Animal Nutritionist
 - Animal Scientist
 - Biologist
 - Botanist
 - Chemist
 - Ecologist
 - Environmental Scientist
 - Geoscientist
 - Hydrologist
 - Microbiologists
 - Oceanographer
 - Plant Biologist
 - Plant Breeder and Geneticist
 - Plant Pathologist
 - Research Chemist
 - Secondary School Teacher
 - Toxicologist
 - Veterinarian