

CTE Industry Credential → Workforce Pathway Matrix

Agriscience / Agricultural Engineering Program

Industry Credential	Technical Skill Area	High School Course Alignment	Postsecondary Pathway	Workforce Occupations	Entry-Level Salary (AZ Est.)
Youth Quality Assurance (YQA)	Livestock care, biosecurity, ethical animal management	Animal Science, Veterinary Science, Livestock Production	Animal Science, Veterinary Technology, Agricultural Education	Livestock Technician, Veterinary Assistant, Herd Manager	\$32,000–\$40,000
Beef Quality Assurance (BQA)	Beef production, food safety, carcass quality	Animal Science, Meat Science	Animal Science, Meat Science, Agricultural Business	Ranch Manager, Feedlot Manager, Meat Processing Specialist	\$38,000–\$55,000
OSHA-10 Agriculture or General Industry	Workplace safety, hazard identification	Agricultural Mechanics, Welding, Construction	Industrial Safety, Engineering Technology	Industrial Technician, Safety Specialist	\$40,000–\$60,000
Lincoln Electric Welding Certification	SMAW, MIG, fabrication, metallurgy	Agricultural Mechanics, Welding Fabrication	Welding Technology, Mechanical Engineering Technology	Welder, Fabricator, Structural Steel Worker	\$45,000–\$65,000
Drone / UAV Remote Pilot Certification (FAA Part 107)	Precision agriculture, aerial mapping, crop analysis	Agricultural Engineering, Precision Agriculture	Agricultural Engineering, Geospatial Science	UAV Technician, Precision Agriculture Specialist	\$55,000–\$80,000
Biotechnology Laboratory Certification	PCR, electrophoresis, lab safety, microbiology	Agricultural Biotechnology, Plant Science	Biotechnology, Molecular Biology, Bioengineering	Laboratory Technician, Agricultural Biotech Specialist	\$50,000–\$75,000
Center for Financial Responsibility Personal Financial Literacy Certification	Budgeting, financial planning, investment analysis	Agribusiness, Agricultural Economics	Finance, Agribusiness Management	Financial Analyst, Loan Officer, Agricultural Lender	\$64,000+
Food Safety / HACCP Certification	Food handling, sanitation, quality control	Food Science, Meat Processing	Food Science, Agricultural Processing	Food Safety Inspector, Quality Assurance Technician	\$40,000–\$58,000

Industry Credential	Technical Skill Area	High School Course Alignment	Postsecondary Pathway	Workforce Occupations	Entry-Level Salary (AZ Est.)
Agricultural Equipment Operation Certification	Tractor operation, equipment maintenance, hydraulics	Agricultural Mechanics	Agricultural Systems Management, Diesel Technology	Equipment Technician, Farm Operations Manager	\$42,000–\$60,000
Environmental & Soil Stewardship Certification	Soil health, water conservation, regenerative agriculture	Environmental Science, Agronomy	Environmental Science, Soil Science	Conservation Technician, Soil Scientist	
Elanco Fundamentals of Animal Science Certification	Animal science fundamentals, livestock management	Animal Science, Livestock Production	Animal Science, Veterinary Technology	Livestock Technician, Animal Care Specialist	\$32,000 – \$42,000
Elanco Veterinary Medical Applications Certification	Veterinary care, disease prevention, and animal physiology	Veterinary Science	Veterinary Technology, Pre-Veterinary Medicine	Veterinary Technician, Veterinary Assistant	\$36,000 – \$48,000
American Meat Science Association Food Safety & Science Certification	Food safety, HACCP, meat processing	Animal Science, Meat Science	Food Science, Animal Science	Food Safety Technician, Meat Processing Specialist	\$40,000 – \$55,000
American Meat Science Association Meat Evaluation Certification	Carcass grading, meat quality analysis	Animal Science	Meat Science, Agricultural Business	Quality Assurance Technician	\$42,000 – \$58,000
BASF Plant Science Certification	Crop production, pest management, and plant physiology	Plant Science, Agronomy	Agronomy, Crop Science	Crop Consultant, Agronomy Technician	\$45,000 – \$60,000
Sports Field Management Association Turfgrass Science Certification	Turfgrass management, irrigation, soil science	Horticulture, Plant Science	Turfgrass Management	Turfgrass Manager, Grounds Manager	\$38,000 – \$52,000

Provided by Dr. Richard McPherson, Agriculture Science Teacher, Rio Rico High School in Arizona