

School-Based Agricultural Education Industry Certifications: Part 1—Introduction to Industry Certifications¹

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Introduction

Since the Smith-Hughes Act in 1917, Career and Technical Education (CTE) has been providing students with the resources and knowledge to be ready to enter the workforce or a secondary career-technical program. Over the years and as technology and industries have evolved, so has CTE, finding its way in many middle schools, high schools, colleges, and universities. To promote CTE, many of its programs throughout the state of Florida in 2007 began offering industry certifications through the passing of the Career and Professional Education (CAPE) Act (Glennie et al., 2022). Today, many CTE programs widely use industry certifications, helping students learn the skills and knowledge needed to engage within their specific career area.

This publication and series are primarily for middle and high school agriscience teachers who are implementing industry certifications into their programs. This resource is designed to help agriscience teachers navigate the many facets of industry certifications. This series will provide guidance on the registration process, various testing platforms, and the benefits of incorporating industry

certification exams within school-based agricultural education (SBAE) programs.

What Are Industry Certifications?

Florida students can earn industry-recognized credentials (also known as certifications) through programs supported by the state's Career and Professional Education (CAPE) Act. These certifications, developed by industry organizations, measure a person's job-specific skills in fields such as architecture and construction, health science, hospitality and tourism, information technology, and agriculture and natural resources. Students who earn certifications are required to demonstrate industry-relevant proficiency, may be eligible to earn college credits based on statewide articulation agreements, and can graduate with documentation of their knowledge and skills in addition to a high school diploma (Dalton et al., 2022). Industry certifications also familiarize students with evolving industry practices and standards. Certification exams offer incentives for teachers and CTE programs if they are successfully passed by the students.

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Courses offered within the agriculture, food and natural resources cluster naturally align with numerous recognized industry certifications that help students gain knowledge of industry procedures and practices. Students enrolled in any agricultural course are eligible to earn industry certifications, depending on the district and school leadership, as well as the availability of trained instructors and required technology (Dalton et al., 2022).

What Certifications Are Available Through the Agriculture and Natural Resources Cluster?

Certification exams are available throughout multiple courses in the pathways of Agriculture, Food and Natural Resources (AFNR); Culinary; Health Science; Information Technology; Business; and Marketing. For this series, we will be focusing on Agriculture, Food and Natural Resources industry certifications (Florida Department of Education, 2022). There are many available certifications as well as a variety of testing platforms/organizations. The associations that offer industry certifications are the Florida Aquaculture Association, Florida Farm Bureau, Florida Nursery Growers and Landscape Association, Florida Veterinary Medical Association, and the American Meat Science Association. The companies and affiliations that offer industry certifications are Elanco, Ducks Unlimited, and Agriculture Education Services and Technology (AEST). The Florida Department of Environmental Protection is also responsible for providing multiple industry certifications. Note that different associations, affiliations, and companies may use the same testing platform. Each of the certifications that these organizations offer could lead to potential employment opportunities for students wishing to pursue a career in agriculture after high school.

See Table 1 for a list of the industry certifications offered through the Agriculture, Food and Natural Resource pathway, along with the issuing organization/provider, the certification title, and the weight associated with these certifications (Florida Department of Education, 2022).

Benefits of Industry Certifications

There are many benefits for students who take and successfully complete a school-based industry certification exam. One of the most popular benefits is that some industry certification exams offer college credit. However, it is important to recognize that industry certification exams must have an articulation agreement with the State Board of Education. If there are no articulation agreements present

for the industry certification given, then it may not count for college credit (Florida Department of Education, 2023). The school-based industry certification exams that currently have an articulation agreement are the Agriculture Associate, Agritechnology Specialist, Animal Science Specialist, Certified Horticulture Professional, Certified Landscape Maintenance Technician, Certified Landscape Technician, and Certified Veterinary Assistant certifications. Students will earn 3 or 6 hours of college credit within the respective associate degree programs when they successfully complete a certificate with the corresponding articulation agreement present (Florida Department of Education, 2023).

Each industry certification carries a “weight.” The weights associated with these exams are based on their level of difficulty. Weights determine the district and program funding, as well as teacher bonuses. Exams can weigh as a 0.1 or 0.2 (Table 1). Programs can use the incentive money toward educational items and materials to supplement instruction and toward co-curricular activities such as leadership conferences, livestock equipment, and tools. Other appropriate expenditures could include purchasing credits for industry certification exams, as well as purchasing supplemental instructional materials that help students prepare for certification exams (Mack & Olivia, 2021).

Industry certification exams can be overwhelming at first glance. After becoming familiar with the issuing providers/organizations, navigating industry certifications is much more manageable. As mentioned throughout this publication, industry certification exams have paved the way for many agricultural education programs. Successfully completed certification exams can result in additional funds for programs, certifications, and college credit for students. This series will also discuss the different testing platforms and entities used for certification testing, registration steps, how to prepare students, and where to find resources for study material.

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Appendix: School Based Agricultural Education Industry Certifications Series

“School-Based Agricultural Education Industry Certifications: Part 1—Introduction to Industry Certifications”

Introduction to agricultural education industry certifications, testing platforms and organizations in Florida.

“School-Based Agricultural Education Industry Certifications: Part 2—Getting Started”

Overview of the Florida testing platforms available, how to register, and important tips to keep in mind.

“School-Based Agricultural Education Industry Certifications: Part 3—Resources and Regulations”

An overview of resources, and how to prepare students for SBAE industry certification exams in Florida.

Table 1. SBAE Program certification titles, providers, and certification weights.

Certification title	Issuing organization/provider	Weight
Aquaculture Technician	Florida Aquaculture Association	0.1
Wastewater Treatment Plant Operator Level C	Florida Department of Environmental Protection	0.1
Water Treatment Plant Operator Level C	Florida Department of Environmental Protection	0.1
Water Treatment Plant Operator Level D	Florida Department of Environmental Protection	0.1
Wastewater Treatment Plant Operator Level D	Florida Department of Environmental Protection	0.1
Agritechnology Specialist Certification	Agricultural Education Services and Technology Inc	0.2
Agricultural Communications Specialist Certification	Agricultural Education Services and Technology Inc	0.1
Agricultural Mechanics Specialist Certification	Agricultural Education Services and Technology Inc	0.1
Animal Science Specialist Certification	Agricultural Education Services and Technology Inc	0.2
Agricultural Unmanned Aircraft Systems Specialist Certification	Agricultural Education Services and Technology Inc	0.1
Agriculture Associate Certification	Agricultural Education Services and Technology Inc	0.2
Forestry Specialist Certification	Agricultural Education Services and Technology Inc	0.1
Agriculture Systems Associate Certification	Agricultural Education Services and Technology Inc	0.1
Natural Resources Specialist Certification	Agricultural Education Services and Technology Inc	0.1
Certified Veterinary Assistant (CVA)	Florida Veterinary Medical Association	0.2
Certified Horticulture Professional	Florida Nursery Growers and Landscape Association	0.2
Certified Landscape Maintenance Technician	Florida Nursery Growers and Landscape Association	0.2
Certified Landscape Technician	Florida Nursery Growers and Landscape Association	0.2
Food Safety and Science Certification	American Meat Science Association	0.1
Ecology Conservation and Management Certification	Ducks Unlimited	0.1
Fundamentals of Animal Science Certification	Elanco	0.1

Note: Find the most up to date and more detailed table here: <https://www.fldoe.org/core/fileparse.php/8904/urlt/2223CAPECertFundList.pdf>.