

Tennessee Promoted Industry Certifications

The department’s goal is that every student in Tennessee graduates high school prepared for postsecondary coursework and qualified for quality employment. To achieve this, high schools are encouraged to place students in career-aligned learning pathways through robust career and technical education (CTE) programs that culminate in the achievement of nationally recognized industry certifications, capstone work-based learning experiences, and/or attainment of postsecondary credit hours through early postsecondary opportunities (EPSOs).

Certification	Aligned Course	Program(s) of Study	Career Cluster(s)
<u>Level I Siemens Certified Mechatronic</u>	Mechatronics II (6157)	Mechatronics	Advanced Manufacturing
<u>Machining Level I - Measurement, Materials, and</u>	Principles of Manufacturing (5922)	Machining Technology; Electromechanical Technology;	Advanced Manufacturing
<u>Production Certification (CPT)</u>	Principles of Machining (5929), Introduction to Electromechanical (6091)	Machining Technology; Electromechanical	Advanced Manufacturing
<u>AWS SENSE Entry Level Welder</u>	Welding I (6078)	Welding	Advanced Manufacturing
<u>AWS SENSE Advanced Level</u>	Welding II (6033)	Welding	Advanced Manufacturing
<u>American Welding Society</u>	Welding II (6033)	Welding	Advanced Manufacturing
<u>NCCER Core Curriculum*</u>	Welding I (6078)	Welding	Advanced Manufacturing
<u>OSHA 10*</u>	Principles of Manufacturing (5922)	Machining Technology; Electromechanical	Advanced Manufacturing
<u>OSHA 30 General Industry*</u>	Any Level 3 or 4 Advanced Manufacturing course	Machining Technology; Electromechanical	Advanced Manufacturing
<u>Precision Measurement Instruments</u>	Principles of Manufacturing (5922)	Machining Technology; Electromechanical	Advanced Manufacturing
<u>FANUC</u>	Robotics & Automated Systems (6143)	Mechatronics	Advanced Manufacturing
<u>Tennessee Specific Industry Certification</u>	Veterinary Science (5961)	Veterinary and Animal Science	Agriculture, Food, & Natural Resources

<u>Commercial Pesticide Certification - Core (03)</u> (Note: Must be 18 years old)	Landscaping and Turf Science (5951)	Horticulture Science	Agriculture, Food, & Natural Resources
<u>Precision Measurement Instruments Certification</u> (Includes all subtests)*	Principles of Agricultural Mechanics (5944)	Agricultural Engineering & Applied Technologies	Agriculture, Food, & Natural Resources
<u>OSHA 10*</u>	Agriscience (5957)	All Agriculture, Food, & Natural Resources	Agriculture, Food, & Natural Resources
<u>OSHA 30 General Industry*</u>	Any Level 3 or 4 Agriculture	All Agriculture, Food, & Natural Resources	Agriculture, Food, & Natural Resources
<u>Briggs and Stratton Basic Small Engine Certification*</u>	Agricultural Power and Equipment (5945)	Agricultural Engineering & Applied Technologies	Agriculture, Food, & Natural Resources
<u>Briggs and Stratton Master Service Technician*</u>	Agricultural and Biosystems Engineering (5963)	Agricultural Engineering & Applied Technologies	Agriculture, Food, & Natural Resources
<u>Tennessee Specific Industry Certification- Horticulture</u>	Landscaping and Turf Science (5951)	Horticulture Science	Agriculture, Food, & Natural Resources
<u>HVAC Excellence, Heating, Electrical, Air Conditioning Technology (H.E.A.T.)</u>	HVAC (6077)	Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction
<u>HVAC Excellence Employment Ready Certifications</u>	HVAC (6077)	Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction
<u>Universal R-410A</u>	HVAC (6077)	Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction
<u>EPA Section 608 Universal</u>	HVAC (6077)	Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction
<u>NCCER Core Curriculum</u>	Fundamentals of Construction (6073)	Residential & Commercial Construction; Structural Systems; Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction

<u>NCCER Carpentry Level One</u>	Structural Systems I (6164)	Structural Systems	Architecture & Construction
<u>NCCER Carpentry Level Two</u>	Structural Systems II (6165)	Structural Systems	Architecture & Construction
<u>NCCER Construction Technology</u>	Residential & Commercial Construction I (6162)	Residential & Commercial Construction	Architecture & Construction
<u>NCCER Electrical Level One</u>	Electrical Systems (6075)	Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction
<u>NCCER Plumbing Level One</u>	Plumbing Systems (6082)	Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction
<u>OSHA 10</u>	Fundamentals of Construction (6073)	Residential & Commercial Construction Structural Systems; Mechanical, Electrical, & Plumbing (MEP)	Architecture & Construction
<u>OSHA 30 Construction</u>	Residential & Commercial Construction II (6163), Structural Systems II (6165),	Residential & Commercial Construction Structural Systems; Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction
<u>Precision Measurement Instruments Certification (Includes all subtests)*</u>	Structural Systems I (6164)	Structural Systems	Architecture & Construction
<u>Precision Measurement Instruments Certification (Includes all subtests)*</u>	MEP Systems (6161)	Mechanical, Electrical, & Plumbing (MEP) Systems	Architecture & Construction

<u>Certified Solidworks Associate*</u>	Architectural & Engineering Design III (5927)	Architecture & Engineering Design	Architecture & Construction
<u>AutoCAD User*</u>	Architectural & Engineering Design III (5927)	Architecture & Engineering Design	Architecture & Construction
<u>Adobe Certified Associate*</u>	Digital Arts & Design III (6087)	Digital Arts & Design	Arts & A/V
<u>Microsoft Office Specialist (Excel)</u>	Advanced Computer	Office Management	Business Management & Administration
<u>Microsoft Office Specialist (PowerPoint)</u>	Advanced Computer Applications (5904)	Office Management	Business Management & Administration
<u>Microsoft Office Specialist (Word)</u>	Advanced Computer Applications (5904)	Office Management	Business Management & Administration
<u>Microsoft Office Expert (pass the two-part Expert Exam in Excel)</u>	Advanced Computer Applications (5904)	Office Management	Business Management & Administration
<u>Microsoft Office Expert (pass the two-part Expert Exam in Word)</u>	Advanced Computer Applications (5904)	Office Management	Business Management & Administration
<u>Microsoft Office Master - Track 1 (Word Expert + Excel Core + Elective)</u>	Advanced Computer Applications (5904)	Office Management	Business Management & Administration
<u>Microsoft Office Master - Track 2 (Excel Expert + Word Core + Elective)</u>	Advanced Computer Applications (5904)	Office Management	Business Management & Administration
<u>Microsoft Office Master - Track 3 (Word Expert + Excel Expert)</u>	Advanced Computer Applications (5904)	Office Management	Business Management & Administration



<u>Google Suite*</u>	Business Management (5889) Human Resources Management (6186)	Office Management; Business Management; Human Resource Management; Health Services Administration	Business Management & Administration
<u>CDA- Child Development Associate</u>	Early Childhood Education Careers (ECEC) III (6017)	Childhood Development Services	Education & Training
<u>QuickBooks Certified User*</u>	Accounting II (5911)	Accounting	Finance
<u>Certified EKG Technician</u>	Cardiovascular Services (6131)	Diagnostic Services	Health Science
<u>Certified Nursing Assistant</u>	Nursing Education (6000)	Nursing Services	Health Science
<u>Certified Pharmacy Technician</u>	Pharmacological Science (6133)	Therapeutic Services	Health Science
<u>Emergency Medical Responder (First Responder)</u>	Emergency Medical Services (5995)	Emergency Services	Health Science
<u>Certified Clinical Medical Assistant</u>	Medical Therapeutics (5999) followed by Clinical Internship (5993)	Therapeutic Services	Health Science
<u>Certified Personal Trainer</u>	Exercise Science (6170) followed by Clinical Internship (5993)	Sport & Human Performance	Health Science
<u>Certified Patient Care Technician*</u>	Nursing Education (6000)	Nursing Services	Health Science
<u>National Entry Level Dental Assistant*</u>	Dental Science (6134)	Therapeutic Services	Health Science
<u>OSHA 10 Health Care*</u>	Any Level 2 – 4 Health Science	All Health Science programs of study	Health Science
<u>ServSafe Food Manager</u>	Culinary Arts III (5981)	Culinary Arts	Hospitality & Tourism
<u>Certified Fundamentals Cook (CFC)*</u>	Culinary Arts IV (6167)	Culinary Arts	Hospitality & Tourism
<u>Certified Hospitality & Tourism Professional*</u>	Hospitality Management (5940)	Hospitality & Tourism Management	Hospitality & Tourism
<u>TN Board of Cosmetology & Barbering - TN Master Barber 1010</u>	Barbering III (5974)	Barbering	Human Services



<u>TN Board of Cosmetology & Barbering - TN Cosmetology 1010</u>	Cosmetology IV (5984)	Cosmetology	Human Services
<u>Tennessee Specific Industry Certification- Dietetics & Nutrition</u>	Nutrition Science & Diet Therapy (6007)	Dietetics & Nutrition	Human Services
<u>Tennessee Specific Industry Certification- Human and Social Sciences</u>	Family Studies (6136)	Human and Social Sciences	Human Services
<u>CCNA Cisco Certified Network Associate</u>	Networking (6097)	Networking Systems	Information Technology
<u>Cisco Certified Entry Network Tech (CCENT)</u>	Computer Systems (6094)	Networking Systems	Information Technology
<u>CompTIA A+</u>	Computer Systems (6094), Cybersecurity I (6175)	Networking Systems; Cybersecurity	Information Technology
<u>CompTIA Network+</u>	Networking (6097), Cybersecurity II (6176)	Networking Systems; Cybersecurity	Information Technology
<u>CompTIA IT Fundamentals</u>	Computer Science Foundations (6905)	Coding; Networking Systems; Web Design; Cybersecurity	Information Technology
<u>CIW Web Design Specialist</u>	Web Site Development	Web Design	Information Technology
<u>CompTIA Security +</u>	Cybersecurity Practicum (6177)	Cybersecurity	Information Technology
<u>Microsoft Technology Associate Software Development Fundamentals</u>	Coding II (6099)	Coding	Information Technology
<u>Associate of ISC2 (Note: Teacher must be ISC2 certified.)</u>	Cybersecurity Practicum (6177)	Cybersecurity	Information Technology

<u>Microsoft Technology Associate Infrastructure*</u>	Networking (6097)	Networking Systems	Information Technology
<u>Cisco IT Essentials PC Hardware & Software Certification*</u>	Networking (6097)	Networking Systems	Information Technology
<u>CIW Web Foundation*</u>	Coding II (6099), Web Site Development (6101)	Coding; Web Site Design	Information Technology
<u>JavaScript Specialist*</u>	Coding II (6099), Web Site Development (6101)	Coding; Web Site Design	Information Technology
<u>Advanced HTML5/CSS3*</u>	Coding II (6099), Web Site Development (6101)	Coding; Web Site Design	Information Technology
<u>Hootsuite Platform Certification*</u>	Marketing and Management II: Advanced Strategies (5932)	Marketing Management	Marketing, Distribution & Logistics
<u>Hootsuite Social Marketing Certification*</u>	Marketing and Management II: Advanced Strategies (5932)	Marketing Management	Marketing, Distribution & Logistics
<u>Certified Logistics Technician*</u>	Supply Chain Management I (6199)	Supply Chain Management	Marketing, Distribution & Logistics
<u>Microsoft Office Specialist (Excel)*</u>	Foundations of Supply Chain Management (6198)	Supply Chain Management	Marketing, Distribution & Logistics
<u>Certified Solidworks Associate (CSWA) – Academic</u>	STEM III (6146); Engineering Design II (6140); Robotics & Automated Systems (6143)	Engineering; Technology; Advanced STEM Applications	STEM
<u>Autodesk Inventor Certified User</u>	Engineering Design I (6139), Digital Electronics (5925), STEM II: Applications (6145)	Engineering; Technology; and Advanced STEM Applications	STEM
<u>FANUC</u>	Robotics & Automated Systems (6143)	Technology	STEM

<u>Precision Measurement Instruments Certification</u> (Includes all subtests)*	Principles of Engineering & Technology (5924), STEM I: Foundation (6144)	Engineering; Technology; Advanced STEM Applications	STEM
<u>I-CAR Refinish Technician ProLevel 1 or I-CAR Non-Structural Technician ProLevel 1</u>	Collision Repair: Non-structural (6062)	Automotive Collision Repair	Transportation
<u>Automotive Service Excellence Student Certification: Maintenance & Light Repair Certification</u>	Maintenance & Light Repair IV (5882)	Automotive Maintenance and Light Repair	Transportation
<u>Automotive Service Excellence Certification: Painting and Refinishing</u>	Collision Repair: Painting & Refinishing (6063)	Automotive Collision Repair	Transportation
<u>Automotive Service Excellence Student Certification: Nonstructural Analysis/Repair</u>	Collision Repair: Non- structural (6062)	Automotive Collision Repair	Transportation
<u>Precision Measurement Instruments Certification</u> (Includes all subtests)	Maintenance & Light Repair III (5881)	Maintenance & Light Repair	Transportation

Although the department recommends that students take the aligned courses to improve a student’s chances of having the knowledge and skills to earn a certification, students are not required to enroll in specific courses to sit for a certification. Many of these certifications represent the culmination of an entire career and technical education program of study, not a single course, although multiple certifications may be offered across a progression of courses. Students are encouraged to sit for the exam at the earliest point they feel ready. For additional information about courses, programs of study, or industry certifications, visit our webpage or contact a career cluster program manager.

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Advanced Manufacturing	John Mummert	John.Mummert@tn.gov	(615) 532-2835
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