

Career & Technical Education in Tennessee

Rich History: CTE in Tennessee

















CTE in Tennessee: In need of reform

Tennessee is at a critical stage in implementing a series of interconnected, statewide reforms.



2013

2018

Transition to career clusters, higher standards in place, revision of CTE standards begins

TN remains fastest improving on NAEP, Tennessee Pathways launches, realignment of workforce regions

2010

2009

New graduation requirements implemented, assessment standards raised Rigorous state standards adopted, Race to the Top awarded

2007

TN gets "F" in "Truth in Advertising"

Gov. Bredesen

Gov. Haslam

Gov. Lee



CTE in Tennessee

Former: 7 Broad "Program Areas"

Current: 16 Nationally Recognized "Career Clusters"

Agriculture Education

Business Technology

Family & Consumer Sciences

Health Science Education

Marketing Education

Technology Engineering Education

Trade & Industrial





CTE in Tennessee

| Program of Study | Level 1 | Level 2 | Level 3 | Level 4 |
|-----------------------|--|---|--|---|
| Mechatronics | Principles of Manufacturing (5922) | Digital Electronics (5925) -or- Robotics & Automated Systems (6143) -or- Project Lead the Way (PLTW) Computer Integrated Manufacturing (6055) | Mechatronics I ¹ (6156) -or- Dual Enrollment Mechatronics (4063) | Mechatronics II ¹ (6157) -or- Manufacturing Practicum (5926) -or- Dual Enrollment Mechatronics (4063) |
| | Industry Certification: Machining Level I - Measurement, Materials, and Safety Certification (NIMS) -and/or- OSHA 10 -and/or- Precision Measurement Instruments Certification (includes all subtests) | Industry Certification: FANUC only with Robotics & Automated Systems (6143) | Industry Certification: OSHA 30 General Industry | Industry Certification: Level 1 Siemens Certified Mechatronic Systems Assistant -and/or- OSHA 30 General Industry |
| Digital Arts & Design | Digital Arts & Design I (6084) | Digital Arts & Design II (6086) | Digital Arts & Design III (6087) -or- Dual Enrollment Arts & Design (4078) | Applied Arts Practicum (6158) -and/or- AP Studio Art: 2-D Design (3545) -or- Dual Enrollment Arts & Design (4078) |
| | | | Industry Certification: Adobe Certified Associate | |



CTE in Tennessee: Then & Now

Before Reforms

2018 Results

Participation:

- Less that 26,000 students concentrate in CTE
- No incentives for earning EPSOs/industry credentials
- EPSO Participation ~ 20%

Alignment:

 Only 26% of students concentrate in a CTE program leading directly to a regional high-demand occupation

Outcomes:

- Postsecondary enrollment gap
- ACT composite below average

- Over 37,000 students concentrate in CTE
- Accountability for readiness using EPSOs/industry credentials
- EPSO participation > 50%
- 76% of CTE programs directly aligned to regional labor market needs
- Growth of in-demand industries (Advanced Manufacturing 300%)
- Postsecondary enrollment gap closed
- ACT composite above average



Rethinking CTE through Perkins V



Expand opportunities for every student to explore, choose, and follow vertically-integrated programs of study and career pathways which lead to quality industry certification and early postsecondary credit attainment.



CTE in Tennessee: Pathways

Tennessee Pathways is the K-12 strategy to ensure more students are contributing to the Drive to 55 attainment goal.



WIOA: Workforce & Economic Development Sector Strategies, In-School & Opportunity Youth, Community Partnerships



CTE in Tennessee: So, What's Next?



Equity

- Data deep dives for diagnostics
- Strategic action planning



Learning & Apprenticeships

- Program models
- Quality placements



Innovation & Success

- Teacher prep
- HS redesign
- Focus on student outcomes

