Career & Technical Education (CTE) Update

New Fairfield High School

November 23, 2026



Overview

Modernizing Career and Technical Education Programs

About Career Clusters

About Industry Recognized Credentials

NFPS Next Steps

Modernizing Career and Technical Education (CTE) Programs

The Intent of the Modernized CTE Framework



Career and Technical Education (CTE) programs in Connecticut are committed to preparing students for high-skill, high-wage, and in-demand occupations in our State through coordinated career pathways.

CSDE has developed a new, modernized CTE Framework to support the design and development of district CTE programs given shifts in the labor market, the nature of work and the workplace, and the role of technology in the workforce.

This modernized CTE Framework is to be used as a map for districts to consider how to ensure college and career readiness skills and opportunities for students.

NFHS Program of Studies, 2026-2027

Career & Technical Education

Students are required to complete two (2) credits from the following courses. Some courses can be counted as CTE or FAPA based on the student's need. However, one course cannot be designated as meeting two requirements toward graduation. Students can have the choice of which category in which the course will be counted.

	Course	Grade Levels			
12132	Information Processing Skills	9			
12103	Introduction to Business	9	10	11	12
12263	Entrepreneurship		10	11	12
12333	Business Law	9	10	11	12
12122	Personal Finance		10	11	12
12214	Marketing I	9	10	11	12
12314	Marketing II	9	10	11	12
12413	Marketing III		10	11	12
19102	Fashion Design I	9	10	11	12
19112	Fashion Design II		10	11	12
19122	Interior Design	9	10	11	12
19202	Culinary Arts I		10	11	12
19212	Culinary Arts II		10	11	12
19213	Culinary Practicum Honors			11	12
19222	Sports Nutrition		10	11	12
19232	Personal Growth		10	11	12
19242	Child Development		10	11	12
19302	Early Childhood Workshop			11	12
17419	Digital Design	9	10	11	12
17420	Digital Design Lab	9	10	11	12
05242	Commercial Art & Design	9	10	11	12
05272	Publications		10	11	12
17425	Digital Production & Broadcasting	9	10	11	12
17422	Animation	9	10	11	12
05696	Music Technology I	9	10	11	12
05697	Music Technology II		10	11	12
17414	Woodworking I	9	10	11	12
17202	Woodworking II		10	11	12
17302	Woodworking III			11	12
17402	Woodworking IV				12
17415	Architectural Design I	9	10	11	12
17416	Architectural Design II	9	10	11	12
17417	Engineering & Design I	9	10	11	12
17418	Engineering & Design II	9	10	11	12
17313	Architectural & Engineering Design Workshop		10	11	12
21152	Foundations of Engineering I	9	10	11	12
21162	Foundations of Engineering II	9	10	11	12
21182	Robotics I	9	10	11	12
21192	Robotics II	9	10	11	12
10194	Introduction to Programming	9	10	11	12
10295	AP Computer Science Principles		10	11	12
10605	AP Computer Science A			11	12
08612	Lifeguard Training		10	11	12



UNLOCKING *Lifelong* POTENTIAL

CONNECTICUT Education

Layer: Career Clusters

- Advanced Manufacturing
- Construction
- Supply Chain & Transportation
- Arts, Entertainment, & Design
- Hospitality, Events, & Tourism
- Financial Services
- Education
- Healthcare & Human Services
- Public Service & Safety
- Agriculture
- Energy & Natural Resources
- Digital Technology
- Marketing & Sales
- Management & Entrepreneurship

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UNLOCKING *Lifelong* POTENTIAL

CONNECTICUT Education

Layer: Sub-Clusters

Caring for Communities

Education
- Early Childhood Development
- Education Administration & Leadership
- Learner Support & Community Engagement
- Teaching, Training, & Facilitation

Healthcare & Human Services
- Behavioral & Mental Health
- Biotechnology Research & Development
- Community & Social Services
- Health Data & Administration
- Personal Care Services
- Physical Health

Public Service & Safety
- Emergency Response
- Judicial Systems
- Local, State, & Federal Services
- Military & National Security
- Public Safety

Building & Moving

Advanced Manufacturing
- Engineering
- Industrial Machinery
- Production & Automation
- Robotics
- Safety & Quality Assurance

Construction
- Architecture & Civil Engineering
- Construction Planning & Development
- Equipment Operation & Maintenance
- Skilled Trades

Supply Chain & Transportation
- Air & Space Transportation
- Ground & Rail Transportation
- Maintenance & Repair
- Marine Transportation
- Planning & Logistics
- Purchasing & Warehousing

Connecting & Supporting Success**

Digital Technology**
- Data Science & AI
- IT Support & Services
- Network Systems & Cybersecurity
- Software Solutions
- Web & Cloud

Management & Entrepreneurship**
- Business Information Management
- Entrepreneurship & Small Business
- Leadership & Operations
- Project Management
- Regulation

Marketing & Sales**
- Market Research, Analytics, & Ethics
- Marketing & Advertising
- Retail & Customer Experience
- Strategic Sales

Creating & Experiencing

Arts, Entertainment, & Design
- Design & Digital Arts
- Fashion & Interiors
- Lighting & Sound Technology
- Media Production & Broadcasting

Hospitality, Events, & Tourism
- Accommodations
- Conferences & Events
- Culinary & Food Services
- Travel & Leisure

Cultivating Resources

Agriculture
- Agribusiness
- Animal Systems
- Food Science & Processing
- Plant Systems
- Water Systems

Energy & Natural Resources
- Clean & Alternative Energy
- Conservation & Land Management
- Ecological Research & Development
- Environmental Protection
- Resource Extraction
- Utilities

Investing in the Future

Financial Services
- Accounting
- Banking & Credit
- Financial Strategy & Investments
- Insurance
- Real Estate

****Cross-Cutting Clusters**
Denote careers that overlap in **all** industries, highlighting the versatile and interconnected nature of today's workforce. These careers can stand on their own or be contextualized in each Cluster and emphasize the need for adaptability in navigating the modern economy.

Crosswalk:

Old Framework to the Modernized Framework

Original Cluster	New Cluster
Agriculture, Food & Natural Resources	Agriculture
Architecture & Construction	Construction
Arts, A/V Technology & Communications	Arts, Entertainment, & Design
Business Management & Administration	Management & Entrepreneurship
Education & Training	Education
Finance	Financial Services
Government and Public Administration	**COMBINED** into Public Service & Safety
Health Science	**COMBINED** into Healthcare & Human Services
Hospitality and Tourism	Hospitality, Events, & Tourism
Human Services	**COMBINED INTO** Healthcare & Human Services
Information Technology	Digital Technology
Law, Public Safety, Corrections & Security	**COMBINED** into Public Service & Safety
Manufacturing	Advanced Manufacturing
Marketing	Marketing & Sales
STEM	**Removed**—Engineering was primarily placed in Adv. Manufacturing
Transportation, Distribution & Logistics	Supply Chain & Transportation
None	Energy & Natural Resources

Implications

Next Generation Accountability Report

Indicator 5: Postsecondary Preparation / College & Career Readiness - Course Taking (Access)

Indicator 5 reports the % of Grade 11 and Grade 12 students who successfully completed at least 1 of the following during their time in high school:

- **2 courses designated as AP, IB, or Dual Credit, or**
- **2 CTE courses in the same career cluster, or**
- **2 workplace experience courses in a given area.**

Intent

This cluster modernization is intended to allow districts to better create cohesive **pathways** that:

1. Reposition courses to promote visibility and relevance

2. Lead to increased career-oriented and work-based learning opportunities, including attainment of **Industry-Related Credentials (IRCs)**, and access to dual credit courses.

About Industry Recognized Credentials (IRC)

CSDE Industry Recognized Credentials (IRC) Registry



Welcome to the CSDE Credential Registry, a curated list of industry recognized credentials and authorizing organizations.

An **Industry Recognized Credential (IRC)** is a certification that validates an individual's knowledge, skills, and competencies within a specific industry. Developed, offered, or endorsed by nationally or regionally recognized industry associations or organizations representing a substantial portion of the industry sector, IRCs set industry standards and serve as benchmarks for employers. It also enhances employability and supports professional growth.

Next Steps: Career Pathways

- **Enhance existing pathways** (Allied Health)
- **Redesign and expand course opportunities to create new pathways** (Education, Marketing)
- **Integrate and expand opportunities in current and future CTE courses for IRCs** (Culinary, Adobe Suite, Engineering)

Next Steps: IRC Opportunities

- **Current:** Culinary IRCs include Food Handler Certification & ServSafe Certification
- **Proposed, 2027-28:** Adobe Suite certifications through the repurposing of the Digital Design Lab course to serve as a Digital Lab course to mentor students who would like to pursue Adobe coursework at this advanced level for the related IRC.
- **Looking ahead ...** Certified Solidworks CAD Associate, Health & Human Services, Marketing, Sewing, Construction, Culinary 1 Certification, Child Development