External Resources by the National Career Cluster 339.32 (3)

School: Boyertown Area Senior High School

General Resources

- College Board
- Big Future
- College Board's College Cost Calculator
- Student Federal Aid
- College Navigator
- Common App
- Military Careers

The National Clusters

The National Career Clusters® Framework has provided a shared structure and language for Career and Technical Education(CTE) program design across the United States. Advance CTE serves as the steward of the Framework. In fall 2024 following 2 years of input and validation, Advance CTE released a modernized Framework designed to serve as a bridge between education and work and a central building block for consistently designed and high-quality CTE programs.

Each cluster is listed below with links to the subclusters (information taken from Advance CTE):

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

Advanced Manufacturing
Sub Cluster
- Engineering
- Industry Machinery

- Production and Automation
- Robotics
- Safety and Quality Assurance

Example Programs of Study
- Engineering
- Precision Machining
- Apparel and Textile Production
- Robotics Technology
- Safety and Environmental Assurance

Links
- [Advanced Manufacturing PA](#)
- [Montgomery County Business Development Center](#)
- [Lehigh University](#)
- [Millersville University](#)

Construction
Sub Clusters
- Architecture and Civil Engineering
- Construction Planning and Development
- Equipment Operation and Maintenance
- Skilled Trades

Example Programs of Study
- Architectural Design
- Drafting
- Surveying
- Diesel Mechanic
- Heavy Machine Operation
- Carpentry
- Welding
- HVAC-R
- Electrical Systems

Links
- [Associated PA Constructors](#)
- [Commonwealth of PA Construction Program Resources](#)
- [Master Builders Association](#)
- [Northampton Community College](#)
- [Pratt Institute](#)
- [University of Maryland](#)

Supply Chain and Transportation
Sub Cluster
- Air and Space Transportation

- Ground and Rail Transportation
- Maintenance and Repair
- Marine Transportation
- Planning and Logistics
- Purchasing and Warehousing

Example Programs of Study
- Aviation Technology
- Commercial Driving
- Auto Body Technology
- Vessel Operations
- Transportation, Distribution, and Logistics Systems
- Supply Chain Management

Links
- [Pennsylvania Department of Transportation](#)
- [American Association of State Highway and Transportation Officials](#)
- [Philadelphia International Airport](#)
- [Thaddeus Stevens](#)
- [Temple University](#)

Arts, Entertainment, & Design
Sub Cluster
- Design and Digital Arts
- Fashion and Interiors
- Fine Arts
- Lighting and Sound Technology
- Media Production and Broadcasting
- Performing Arts

Example Programs of Study
- Graphic Arts
- Interior Design
- Museum Studies
- Sound Engineering
- Journalism
- Stage Design and Management

Links
- [Association of Performing Arts Individuals](#)
- [Screen Actors Guild](#)
- [Lehigh University](#)
- [New York University](#)
- [Bryn Mawr College](#)
- [Ringling College of Art and Design](#)

Hospitality, Events, and Tourism

Sub Cluster
- Accommodations
- Conferences and Events
- Culinary and Food Services
- Travel and Leisure

Example Programs of Study
- Hotel and Resort Management
- Conference Planning
- Nutrition
- Pastry Arts
- Outdoor Recreation
- Tourism Management

Links
- [Adventure Travel Society](#)
- [International Ecotourism Society](#)
- [US Travel Association](#)
- [Cornel University](#)
- [Penn State University](#)
- [Colorado Mountain College](#)
- [Montgomery County Community College](#)
- [Culinary Institute of America](#)

Financial Services
Sub Cluster
- Accounting
- Banking and Credit
- Financial Strategy and Investments
- Insurance
- Real Estate

Example Programs of Study
- Accounting
- Banking
- Business Administration
- Insurance Operations
- Real Estate

Links
- [My Money](#)
- [Corporate Finance Institute](#)
- [Bureau of Labor Statistics](#)
- [Duquesne University](#)
- [Saint Joseph's University](#)
- [Reading Area Community College](#)
- [Temple University](#)

Education

Sub Cluster
- Early Childhood Development
- Education Administration and Leadership
- Learner Support and Community Engagement
- Teaching, Training, and Facilitation

Example Programs of Study
- Early Childhood Education
- Educational Leadership
- Library Service
- Principles of Teaching

Links
- [PA Department of Education](#)
- [Teaching in PA](#)
- [Teachers of Tomorrow](#)
- [West Chester University of Pennsylvania](#)
- [Kutztown University](#)

Healthcare & Human Services

Sub Cluster
- Behavioral and Mental Health
- Biotechnology Research and Development
- Community and Social Services
- Health Data and Administration
- Personal Care Services
- Physical Health

Example Programs of Study
- Counseling
- Biomedical Science
- Social Work
- Medical Record Keeping
- Cosmetology
- Sports Medicine
- Nursing

Links
- [US Department of Health and Human Services](#)
- [Montgomery County Health and Human Services](#)
- [National Organization for Human Services](#)
- [Cedar Crest College](#)
- [Villanova University](#)
- [Peirce College](#)
- [Temple University](#)

- [Aveda Institute](#)
- [Landsdale School of Cosmetology](#)

Public Service & Safety

Sub Cluster
- Emergency Response
- Judicial Systems
- Local, State, and Federal Services
- Military and National Security
- Public Safety

Example Programs of Study
- Fire Science
- Legal Studies
- Public Management and Administration
- National Security
- Law Enforcement
- Criminal Justice

Links
- [Commonwealth of PA Public Safety](#)
- [Public Safety App](#)
- [Department of Homeland Security](#)
- [Association of Military Colleges and Schools of the United States](#)
- [John Jay College of Criminal Justice](#)
- [Montgomery County Community College](#)

Agriculture

Sub Cluster
- Agribusiness
- Agricultural Technology and Automation
- Animal Systems
- Food Science and Processing
- Plant Systems
- Water Systems

Example Programs of Study
- Agricultural Finance
- Urban Farming
- Veterinary Science
- Sustainable Food and Farming
- Horticulture
- Marine Biology

Links
- [PA Farm Link](#)
- [PA Preferred](#)

- [University of Pennsylvania](#)
- [Lehigh Carbon Community College](#)
- [Michigan State University](#)
- [University of Washington](#)
- [West Virginia University](#)

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

Example Programs of Study
- Solar System Design and Installation
- Wildlife Management
- Environmental Science and Sustainability
- Climate Resilience
- Mining Technology
- Plant Operations

Links
- [US Department of Energy](#)
- [Department of Conservation and Natural Resources](#)
- [Delaware Valley University](#)
- [Arizona State University](#)
- [Lees McRae](#)
- [Wentworth University of Technology](#)

Digital Technology
Sub Cluster
- Data Science and Artificial Intelligence
- Information Technology Support and Services
- Network Systems and Cybersecurity
- Software Solutions
- Unmanned Vehicle Technology
- Web and Cloud

Example Programs of Study
- Applied Data Science and Analytics
- Information Support and Services
- IT Systems
- Programming
- Drone Technology
- Web Development

Links
- [Technology and Services Industry Association](#)
- [Information Technology Industry Association](#)
- [Luzerne County Community College](#)
- [New England Institute of Technology](#)
- [Drexel University](#)

Marketing & Sales
Sub Cluster
- Market Research, Analytics, and Ethics
- Marketing and Advertising
- Retail and Customer Experience
- Strategic Sales

Example Programs of Study
- Social Media and Analytics
- Marketing
- Merchandising
- Business Communications

Links
- [American Marketing Association](#)
- [National Association of Sales Professionals](#)
- [University of Virginia](#)
- [Chestnut Hill College](#)

Management & Entrepreneurship
Sub Cluster
- Business Information Management
- Entrepreneurship and Small Business
- Leadership and Operations
- Project Management
- Regulation

Example Programs of Study
- Business Technology Applications
- Entrepreneurship
- Human Resources Management
- Principles of Management
- Business Law

Links
- [The Management Center](#)
- [Entrepreneurs Organization](#)
- [York College of Pennsylvania](#)

Local Career Resources

Resource Type	List of Resources
Organizations / Agencies	
Intermediary Organizations	• Berks County Technical Center • Berks County Technical Center (Leesport Campus) • Pennsylvania School Counselor Association • Berks Area School Counselor Association -BASCA Career Fair • Boyertown Area Senior High Internship Program • Berks County CareerLink • Berks County Intermediate Unit
Umbrella Organizations	• Rotary • Berks Mont Business Association • Tri County Chamber of Commerce • Greater Reading Chamber of Commerce & Industry
Community / State Agencies	• Career Ready Berks • Berks County Intermediate Unit • United Way • Office of Vocational Rehabilitation • Military Representatives • PDE – Career Ready PA Resources
Community Events	• Berks County Spring College Fair • Montgomery County Community College FAFSA Night • Reading Area Community College Financial Aid Night
Individual Contacts	• Dual Enrollment Partners- Reading Area Community College, Harrisburg University, Montgomery County Community College • Boyertown Area Senior High School Counselors • Boyertown Senior High School Internship Coordinator
Internet Resources	• Career Cruising www.careercruising.com • PHEAA • collegeboard.org • actstudent.org • Federal Student Aid (FAFSA)