

# Programs By Career Cluster:

## Transportation

### Automotive Technology **D** **C**

Students learn to maintain, diagnose and repair passenger vehicles. Students identify mechanical and electronic/computer issues that affect vehicle performance and safety. Students will utilize computer based diagnostic equipment as a source of vehicle analysis.



#### Possible Career Paths:

- *With a 2-year CTE program:* Automotive Technician, increased demand 8.1%\*
- *An associate's degree or postsecondary:* Diesel Engine Specialist, increased demand 10.9%\*
- *A bachelor's degree:* Mechanical Engineer, increased demand 9%\*

### Auto Body and Collision Repair Technology **C**

Students learn the fundamentals of repairing and refinishing damaged vehicles. Students also learn the fundamentals of metal straightening, MIG-welding, plastic fillers, plastic repair, major collision repair, hardware repair and service, detailing, and refinishing.



#### Possible Career Paths:

- *With a 2-year CTE program:* Entry Level Detailing Technician, increased demand 14.7%\*
- *An associate's degree or postsecondary:* Auto Body Repairer, increased demand 10.9%\*
- *A bachelor's degree:* Materials Engineer, increased demand 12.5%\*

### Heavy Equipment Operation and Maintenance **C**

Students learn the skills required by heavy equipment operators for light construction, landscaping and highway industries. Students learn to safely operate, maintain, diagnose, and repair construction-related equipment.



#### Possible Career Paths:

- *With a 2-year CTE program:* Equipment Operator, increased demand 13.8%\*
- *An associate's degree or postsecondary:* Mobile Heavy Equipment Mechanic, increased demand 7.7%\*
- *A bachelor's degree:* Civil Engineer, increased demand 15.8%\*

### Outdoor Powersports Technology **C**

Students will learn how to maintain, improve, diagnose/troubleshoot, and repair two and four stroke powered machines. The theory behind carburetion, fuel injection, direct injection, ignition, electrical, cooling, two and four stroke engines, and drive systems are some of the topics covered.



#### Possible Career Paths:

- *With a 2-year CTE program:* Powersports Technician, increased demand 4%\*
- *An associate's degree or postsecondary:* Motorboat Mechanic, increased demand 4%\*
- *A bachelor's degree:* Automotive Mechanical Engineer, increased demand 9%\*

#### KEY

**D** Dual Enrollment

**C** Industry Credentials (or credentialing/ licensing preparation)

\* Projected New York State Finger Lakes Region growth for 2016-2026, New York State Department of Labor

# Programs & Career Cluster Alignment

Our programs correlate to one or more US Dept. of Education Career Clusters

<u>Program</u>	<u>Correlated Career Clusters</u>	<u>Program</u>	<u>Correlated Career Clusters</u>
Auto Body and Collision Repair Technology	Transportation, Distribution & Logistics Science, Technology, Engineering & Mathematics	Dental Assisting	Health Science
Automotive Technology	Transportation, Distribution & Logistics Agriculture, Food & Natural Resources	Digital and Visual Communication	Arts, A/V Technology & Communications
Baking	Hospitality & Tourism Human Services	Engineering and Metal Fabrication - Machining	Manufacturing Transportation, Distribution & Logistics
Carpentry	Architecture & Construction Science, Technology, Engineering & Mathematics	Engineering and Metal Fabrication - Welding	Manufacturing Transportation, Distribution & Logistics
Child and Family Development	Education & Training Human Services	Exercise Science	Health Science
Computer Technology	Information Technology Science, Technology, Engineering & Mathematics	HVAC/Plumbing	Architecture & Construction
Introduction to Construction Trades	Architecture & Construction Science, Technology, Engineering & Mathematics	Heavy Equipment Operation and Maintenance	Transportation, Distribution & Logistics Agriculture, Food & Natural Resources
Cosmetology	Human Services Marketing	Nurse Assisting and Associated Health Careers	Health Science
Criminal Justice	Law, Public Safety, Corrections & Security Government & Public Administration	Outdoor Powersports Technology	Transportation, Distribution & Logistics
Culinary Arts	Hospitality & Tourism Human Services	Phlebotomy and Laboratory Science	Health Science Agriculture, Food & Natural Resources
		Residential and Commercial Electrical	Architecture & Construction Science, Technology, Engineering & Mathematics
		New Visions Health Professions	Health Science

For details on Career Clusters, visit the U. S. Department of Education website or Advance CTE ([careertech.org](http://careertech.org))