# Middle School Transportation Systems Courses

		Curriculum Code/Hours		
Subject Code	Course Title	VT	V3	VM
Ground Transportation (T9)				
177000	Ground Transportation Maintenance	120-280	60	30-90
177011	Collision Nonstructural Inspection and Repair	120-280	60	30-90
990364	Career Connections (grade level 7-9 only)			30-60
Air Transportation (TA)				
177013	Aviation	120-280	60	30-90
990364	Career Connections (grade level 7-9 only)			30-60

Curriculum Code	Grades	CT Funded	Assessment	Counts toward Concentrator
VT	7-12	Yes	Required	Yes
V3	7-12	Yes	Not required	No
VM	7-10	Yes	Optional	No

- Career-Technical Middle School Courses require an approved CTE-26 and program of study.
- Middle School Courses must be aligned to an approve CTE-26 pathway at the High School/Joint Vocational School.
- Students enrolled in Career-Technical Middle School Courses (VT, VM) are eligible for participation in Career-technical Student Organizations (CTSO).
- Granting High School credit for Career-Technical Middle School Course high school courses is a local school district decision.
- VM Courses do not count towards four course minimum.
- All students enrolled in a correlated technical related class (V3 Curriculum Element option) must also be funded in an approved workforce development anchor class (VP or VT).



#### **Ground Transportation Maintenance**

# Subject Code: 177000

In this first course, students will apply skills needed to inspect and perform general service on vehicles. Students will research applicable service information and technical service bulletins and perform maintenance on vehicles. Students will inspect and service engine, drive train, suspension, steering, electrical and braking systems. Students will perform ignition maintenance including spark plug/glow plug and ignition wire and coil pack replacement. Additionally, students change fluids, filters and inspect vehicles for leaks and fluid condition.

## **Collision Nonstructural Inspection and Repair**

# Subject Code: 177011

Students will learn the skills and knowledge of automotive body panel repairs, replacements, and adjustments. Students will analyze, document, prepare estimates and repair nonstructural collision damage. Students will remove corrosion protection, undercoating, sealer, and other protective coatings as necessary to perform repairs. Emphasis will be given to joining and cutting aluminum, steel and other metals. Students will maintain tools and facilities while complying with personal and environmental safety practices.

### Aviation

## Subject Code: 177013

In this first course, students apply knowledge of aviation theory and navigation to flight performance and planning. Students will apply principles of simple machines and fluid mechanics to aircraft operations. Identification of aircraft engines and airframe related systems will be emphasized. Weather theories and concepts are used to interpret weather-briefing documents. Additionally, students will distinguish among airport environments, and understand rules, regulations and orders relevant to the airport industry.

#### **Career Connections**

## Subject Code: 990364

This course shows students how classroom learning translates into marketable skills. Through hands-on learning and local business involvement, students will engage in career-related experiences to acquire basic skills in various career fields. This provides students with tangible experiences to begin career decision making. Teachers have the flexibility to select career fields related to Ohio's in-demand jobs represented in the community.

