

# TRANSPORTATION CLUSTER

## **T5503I Introduction to Transportation (4798)**

**Open to grades 9-12**

**2 semesters, 1 credit per semester**

**Meets requirements of: THD, AHD, Core 40**

**Dual Credit Might be Available**

Introduction to Transportation is an introductory course designed to help students become familiar with fundamental principles in modes of land, sea, air, and space transportation, including basic mechanical skills and processes involved in transportation of people, cargo and goods. Students will gain and apply knowledge and skills in the safe application, design, production, and assessment of products, services, and systems as it relates to the transportation industries. Content of this course includes the study of how transportation impacts individuals, society, and the environment. This course allows students to reinforce, apply, and transfer their academic knowledge and skills to a variety of interesting and relevant transportation related activities, problems, and settings.

## **T6821I & T6822I Automotive Services Technology I (7213 & 7212)**

**Open to grades 10-12**

**2 semesters, 2 credit per semester**

**Meets requirements of: AHD, THD, CORE 40**

**Recommendation(s): Introduction to Transportation**

**Dual Credit Might be Available**

Automotive Services Technology I is a one year course that encompasses the sub topics of the ASE identified areas of Steering & Suspension, Electricity and HVAC. This one-year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions and differentials, automatic transmissions, and engine repair shall be covered as time permits. This one-year offering meets the ASE program certifications for the two primary areas offered. This course provides the opportunity for dual credit for students who meet postsecondary requirements and successfully complete the dual credit requirements. Mathematical skills will be reinforced through precision measuring and cost estimation activities. Scientific principles taught include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.

## **T6823I & T6824I Automotive Services Technology II (5546)**

**Open to grades 11-12**

**2 semesters, 2 credits per semester**

**Meets requirements of: AHD, THD, CORE 40**

**Prerequisite(s): Automotive Services Technology I**

**Dual Credit Might be Available**

Automotive Services Technology II is a one-year course that encompasses the sub topics of the ASE identified areas of Braking Systems and Engine Performance. This one-year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions /differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one-year offering must meet the ASE program certifications for the two primary areas offered in this course. Mathematical skills will be reinforced through precision measuring and cost estimation activities. Scientific principles taught include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors.