



# Keystone Development Partnership

*A Statewide Partnership to Meet the Needs of New  
Technology for the Pennsylvania Workforce*

---

## **Proposed High School Curriculum Overview**

### **Background and sources**

In 2004, the Keystone Transit Career Ladder Partnership (Transit Partnership) commissioned Educational Data Systems, Inc. (EDSI) to design curriculum for high school students to prepare for a career at the Southeastern Pennsylvania Transportation Authority (SEPTA). The program prepares the student to enter into an apprenticeship or entry-level position leading to SEPTA 3<sup>rd</sup> Class Vehicle & Equipment Mechanic position.

This curriculum prepares the student for a possible career as a mechanic or technician in the public transit industry. The curriculum includes training in basic skills, mechanical competence, and lessons to perform tasks associated with the SEPTA entry-level vehicle mechanic positions. This curriculum is designed to fill two consecutive class periods for an entire academic year with 270 hours of total instructional time.

EDSI developed this curriculum from the following resources:

1. Mechanical Readiness curriculum provided for the Transit Partnership
2. SEPTA Bus General Helper and 3<sup>rd</sup> class job tasks provided for the Transit Partnership
3. Basic Skills and mechanical readiness curriculum developed by SEPTA
4. Existing SEPTA course descriptions and conversations with SEPTA mechanics

### **Target student:**

High School Students, 10<sup>th</sup> –12<sup>th</sup> grade with an interest in a career in public transit

### **Prerequisites:**

- Mechanical aptitude with an interest in a career in transit maintenance
- Ability to pass the Bennett Test and Test of Adult Basic Education (TABE)
- Other academic requirements to be determined

### **Proposed Training Period:**

Two class periods per day (45 minute for 2 class periods for 180 school days = 270 available training hours)

### **Environment:**

Classroom environment, bus, and training lab with components available for extensive hands-on training

### **Course Overview:**

Introduction to public transit technology and basics of vehicle maintenance. The goal of the course is to prepare students to perform in an entry-level maintenance position or enter an apprenticeship for public transit vehicle mechanic. The curriculum also provides the foundation for many skills needed as a mechanic.

## **Course Content**

### ***Basic Skills / Technical Preparation*** (30 hours)

- Provide students with a background and history of public transportation
- Information on current urban and rural transportation systems
- Background and purpose of organized labor in America
- Using math, reading, writing, and computing skills in the workplace
- Basic info on current technology of buses and rail systems

### ***Mechanical Readiness*** (72 hours)

- Shop safety
- Measurement with gauges and tools
- Mechanical knowledge and reasoning
- Basic electricity
- Hand and power tools
- Reading blueprints

### ***General Helper / Basic Bus Maintenance*** (120 hours)

- Bus Familiarization / Intro to Operations and Features (customized to transit agency specifications)

### ***For more information and more details for curriculum contact:***

Stuart Bass, Director  
Keystone Development Partnership  
[sbass@kdpworks.org](mailto:sbass@kdpworks.org)  
(215) 284-4218