



## **Division of Science, Technology, Engineering, and Mathematics**

### **Automotive Technology: TSEP: Electrical/ Engine Performance/HVAC Certificate**

The Technical Service Education Program is designed to provide the technical competence and professionalism needed to become a TSEP technician. Students are required to work at a participating repair facility as part of the cooperative education phase of their training.

Successful graduates of the program will be able to:

1. Diagnose and repair common conditions of the following automotive systems: electrical/electronics, engine performance, and heating and air conditioning, utilizing the three "c" approaches: condition, cause, and correction.
2. Operate the latest generation of computerized test and diagnostic equipment.
3. Practice sound, basic, safe automotive shop skills, including personal and environmental protection along with handling of hazardous materials.
4. Practice good basic shop habits, including demonstrating a good attendance record, punctuality, a willingness to work, and an ability to work independently or with others as a team.
5. Apply basic laws of physics/scientific principles to automotive systems and components when performing in shop testing exercises and diagnosing problems.
6. Locate and interpret technical data represented in online and original equipment manufacturer (OEM) provided resources.
7. Demonstrate good automotive shop management practices, customer relations, shop procedures, and writing skills to work with a diverse population of customers.
8. Accept the challenge of continuous training in the automotive field, that is, "learning to learn", which will be necessary to adapt to new technologies and to become a problem solver and a critical thinker.