

HIGH SCHOOL AUTOMOTIVE SERVICE TECHNOLOGY LABORATORY

New Construction

I. PROGRAM PHILOSOPHY

The automotive service world as we know it is changing rapidly and students must be prepared with the skills to meet those changes. Technology can be used to improve the teaching and learning process as well as provide students the skills needed for the changing world of automotive service technology. The integration of computer technology into the automotive service industry requires that all individuals have a basic understanding of the function of computers, electronic testing equipment and the impact that they are having on automotive service business activities.

II. PROGRAM GOALS

- A. To provide opportunities for the development of informational problem solving skills using electronic automotive service business technology.
- B. To develop an understanding of individuals' changing roles and responsibilities as automotive service technology increasingly impacts society.
- C. To develop the ability to use automotive service technology computer applications for learning and productivity.
- D. To provide students with an environment to work cooperatively in small or large groups in a variety of creative experiences.
- E. To provide professional development for teachers and administrators in using automotive service technology.

III. PROGRAM ACTIVITIES

Automotive service technology education clusters include business management concepts, computer technology application, business support systems and computer accounting.

The automotive service technology management cluster is designed to train students for entry level employment in automotive service companies.

Automotive service technology cluster is designed to train students to become entry level employees in the automotive service industry. This cluster may also help students prepare to seek degrees in business administration.

The automotive service support systems cluster helps prepare students for entry level employment in automotive service industry and help prepare them to seek degrees in business administration at public and private universities.

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IV. ORGANIZATIONAL NOMENCLATURE

Teacher - Student Ratio:	1:25
Student Capacity per Period:	25
Total Number of Teachers:	1
Total Number of Aides:	NA (If applicable)
Grade Levels or Age Levels for Which Program is intended:	9 - 12 and Adults
Hours per Day Space Will Be Used:	6 - 10

V. INNOVATIONS, EXPERIMENTAL IDEAS, OTHER PLANNED USES

N/A

VI. SQUARE FOOTAGE CHANGES EXPLANATION THAT VARIES FROM APPROVED FACILITIES LIST

N/A

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VIII. PROGRAM FURNITURE AND EQUIPMENT REQUEST FORM

*Shown on drawing

purchased and installed by contractor

Space or Area Number of Items Description of Furniture/Equipment Needed

AUTOMOTIVE SERVICE TECHNOLOGY LABORATORY

*6	Automotive work bays
25	Student desks, in classroom
1	Electric Pencil Sharpener, in classroom
25	Computers
4	Printers, in classroom
4	Printer stands, in classroom
*1	Computer (teacher), in Teacher Planning
1	Teacher Chair, in Teacher Planning
1	Interactive attached projector, in classroom
*1	Four-Drawer File Cabinet, Lockable, in Teacher Planning
1	Sound enhancement equipment system including amplifiers, speakers, and microphones, in classroom
#1	Provide one glasses/goggles sanitizing cabinet with 20 safety glasses and 10 goggles.
#5	Provide five (5), 9000 pound capacity, clean floor, asymmetric, full-height, above-ground vehicle lifts.
#1	Provide one (1) 4-wheel alignment rack and diagnostic/metrology module.

IX. SPECIAL CONSIDERATIONS

- Heating/Cooling/Ventilation

Provide an exhaust system in the Laboratory, capable of removing fumes generated by test engines and vehicles.

- Floor

Sealed concrete in automotive work area and storage rooms.

Provide painted non-skid zone boundary lines around all equipment.

- Ceiling

No ceiling in garage area – paint exposed structure.

- Windows

View windows between Teacher Planning and Lab to provide supervision.

- Doors

Provide a standard single door adjacent to an overhead roll-up door 16' wide x 10' high

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IX. SPECIAL CONSIDERATIONS (continued)

- **Plumbing**

Program requires a multi person semi-circular wash station with three faucets for hand washings in the auto mechanics service area.

All drinking fountains inside buildings shall be electric water-coolers

- **Electrical**

Adequate electrical outlets shall be provided at each work station along the walls. Minimum of one electrical cord and reel at each work station suspended from structural member above.

- **Gas and Air**

Compressed air at each work station along the walls and suspended from structural members above using hose reels at each work station, including work spaces in the middle of the building.

Provide compressed air at 120 pounds per square inch, 10 cubic feet per meter, with one pressure regulator and dryer for each outlet.

- **Fencing**

Provide a 6 foot high chain link fence to enclose the exterior parking/work area with a pair of swing gates 16 feet wide for vehicles on north side and a swing gates 3 feet wide for personnel on south side.

- **Service Drives**

Driveway from main parking lot to the exterior parking/work area. Provide convenient access from driveway to the overhead roll-up door to facilitate delivery of materials.

- **Built-in Cabinetry**

Related Classroom

One 4 ft. x 16 ft. magnetic white markerboards and one 4 ft. x 4 ft. tackboards. Standard markerboards to have eraser tray, flag holder and demountable map railing. Install an interactive projector in the center of the markerboards.

Provide wheeled cabinet with doors for sound enhancement equipment and amplifier. Cabinet and equipment shall be located at, or adjacent to, the major teaching wall with tethered wiring and harnesses. Equipment purchased with Furniture, Fixtures, Equipment & Technology (FFE&T) funds.

The back of the cabinet must allow connections of white speaker wire for the four speakers used with sound enhancement equipment, a network connection, connection to interactive projector and power.

16 Linear Feet of Tackboard