

# MOTORCYCLE SERVICE TECHNOLOGY ADVANCED TECHNICIAN

Inspect, service, and repair motorcycles. Students gain valuable experience in a simulated motorcycle shop environment. Internship opportunities available after the first year.

**mechanical motorcycle repair | electrical vehicles | testing , troubleshooting, & maintenance | shop & business management**

## Suggested Abilities

- ▶ 8th grade English reading, writing, speaking, and listening
- ▶ Understand basic algebra
- ▶ Lift 30 pounds
- ▶ Sustained activity for 5 hours at a time

## Prerequisites

- ▶ *High School Students: Meet with counselor for eligibility requirements*

## Class Hours

- ▶ Morning (First Year): 7:50am - 10:40am, Mon. - Fri.
- ▶ Afternoon (Second year): 12:05pm - 2:55pm, Mon. - Fri.
- ▶ Evening (Rotating first year & second year): 5:30pm - 9:30pm, Mon. - Thu.

## SEMESTER 1

### SVT 1001 SVT Orientation and Safety

**1 credit**

Motorcycle vehicle repair: job options, construction types, general repair, shop safety, hazardous materials handling/disposal, and tool/equipment uses and maintenance.

### SVT 1002 SVT Rolling Chassis

**3 credits**

Motorcycle chassis components and basic servicing of frames, suspension, tires, wheels, and brakes, covering diagnostics, routine maintenance, minor repairs, adjustments, and special tools.

### SVT 1003 SVT Electrical Theory

**2 credits**

Motorcycle automotive electricity and basic electrical theory, circuit designs, and wiring methods. Focuses on multi-meter usage and wiring diagrams.

### SVT 1041 Math for Transportation I

**3 credits**

Introductory applied mathematics, including measurement, algebra, geometry, trigonometry, graphs, and finance, with emphasis on practical applications.

### SVT 1043 Physics for Transportation

**3 credits**

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## SEMESTER 2

### **SVT 1005 4-Stroke Engines**

**2 credits**

Introduction to Basic Four-Stroke engine theory, operation and repair.

### **SVT 1006 SVT Electrical Repair**

**2 credits**

Diagnose motorcycle vehicle electrical systems and provide hands-on training for proper repair techniques.

### **SVT 1007 SVT Drive Systems**

**2 credits**

Drive components used on modern motorcycle vehicles: Transmission Assemblies, clutch components, Chain and Belt Drive Systems.

### **SVT 1008 SVT Trade Practices**

**1 credit**

Business development and ownership as related to the Motorcycle Vehicle Industry.

## **SEMESTER 3**

### **SVT 2001 Advanced Rolling Chassis**

**4 credits**

Servicing and repair of motorcycle frames, suspension, tires, wheels, and brakes- diagnostics, maintenance, major repairs, and special tools.

### **SVT 2002 Advanced SVT Electrical Systems**

**4 credits**

Advanced repair and troubleshooting of systems with an emphasis on ignition and charging system diagnosis and repair techniques.

## **SEMESTER 4**

### **SVT 2004 Simulated Shop Operation**

**3 credits**

Shop operations and vehicle repair: documentation, basic accounting, insurance, safety, customer relations.

### **SVT 1042 Math for Transportation II**

**4 credits**

Applied mathematics: measurement, algebra, geometry, trigonometry, graphs, and finance, with emphasis on practical applications.

### **SVT 1044 Transportation Communication**

**1 credit**

Offers students the development of skills that are needed to search for a job.

### **SVT 2099 SVT Independent Study**

**3 credits**

Designed to allow the student to focus on a topic of study as agreed upon between the student and the instructor. Course study will be tailored for each student's specific needs.

### **SVT 2003 Advanced 2/4/Stroke Engines**

**4 credits**

Lecture and lab focused on diagnosing, correcting, repairing, and renewing performance issues in two- and four-stroke sport vehicle engines.

### **SVT 2080 SVT Internship**

**3 credits**

Completes on-the-job learning at an approved business, performing employer-assigned tasks and meeting objectives agreed upon with the instructor.

## **Motorcycle Service Technology Advanced Technician Certificate**

2 Years

51 Credit Hours



**Information Revised DEC '25.** Information subject to change. Course listings have been paraphrased on this flyer, for full course info please see Pickens Catalog. This certificate is eligible for Financial Aid. If you have further questions, please call (303)344-4910.