



# MOTORCYCLE SERVICE TECHNOLOGY ADVANCED TECHNICIAN

## Motorcycle Service Technology Advanced Technician Certification

Inspect, service, and repair motorcycles

Inspect, service, and repair motorcycles using mechanical theory, tool operation, engine construction understanding, diagnostic procedures, and electrical theory. The motorcycle service technology program will help students learn a variety of skills used in the industry, including the following:

- Tool identification and usage to perform specific tasks or functions
- Mechanical and electrical theory
- Observing and testing vehicle equipment to detect potential problems
- Replacement of worn, damaged, or defective mechanical parts and basic maintenance
- Shop management, design, and best business practices
- Employment opportunities after completion of the first year
- Internship opportunities during the second year
- Introductoin to electrical motorcycle (EV) technology

### Suggested educational levels:

- English literacy (reading, writing, speaking, and listening)
- Understanding of basic algebra

### Suggested physical abilities:

- Capable of lifting 30 pounds
- Capable of sustained activity for 5 hours at a time

### Class Hours:

- First year of program, morning option: 7:50am - 10:40am Mon. - Fri.
- First year of program, evening option: 5:00pm - 9:00pm Mon. - Thu.
- Second year of program, afternoon: 12:05pm - 2:55pm Mon.- Fri.
- Program is 4 semesters in length, with start dates in Fall

## Tuition and Credit Hour Calculation

### Semester 1

\$1,560.00 (Tuition)
+ \$170.00 (Credit Hour Fee)
<b>\$1,730.00</b>

### Semester 3

\$1,560.00 (Tuition)
+ \$170.00 (Credit Hour Fee)
<b>\$1,730.00</b>

### Semester 2

\$1,560.00 (Tuition)
+ \$170.00 (Credit Hour Fee)
<b>\$1,730.00</b>

### Semester 4

\$1,560.00 (Tuition)
+ \$170.00 (Credit Hour Fee)
<b>\$1,730.00</b>

*Based on Colorado Resident In-State Tuition*

## Estimated Program Costs *(to be paid at Picken's payment office)*

### Tuition and Credit Hour Fees:

**Semester 1:** \$1,730.00

**Semester 2:** \$1,730.00

**Semester 3:** \$1,730.00

**Semester 4:** \$1,730.00

### Required On Campus Costs:

**Program Charges:** \$500.00 (each semester)

**Student ID:** \$10.00 (each year)

**CTSO Charge:** \$20.00 (each year)

**Textbook or E-book:** \$112.00 (+ tax)

### Estimated Total:

**Motorcycle Service Technology Advanced Technician Certificate:**

**\$9,092.00 (+tax)**

## Additional Relevant Costs *(estimated)*

### Required Off Campus Costs:

**Safety Glasses:** \$5.00 (+ tax)

**Shop Shirt:** \$40.00 (+tax)

**Credits:**  
**48**

**Length:**  
**2 years**

**Cost:**  
**\$9,092**



Cost and information revised **March 2023**

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# MOTORCYCLE SERVICE TECHNOLOGY ADVANCED TECHNICIAN

## Courses required for this certificate: Semester 1

### SVT 1001 SVT Orientation and Safety

Designed as an orientation to the sport vehicle repair industry. Students receive an overview of job possibilities as well as learn various types of sport vehicle construction. Focuses on general sport vehicle repair and service shop safety procedures with an emphasis on personal and environmental safety issues. Students also learn the proper handling and disposal of hazardous materials. Names, uses and maintenance procedures for a variety of tools and equipment are addressed.

### SVT 1002 SVT Rolling Chassis

Designed to introduce students to the major "chassis" components of motorcycles. This class will provide training in the basic servicing of motorcycle frames, suspension, tire, wheel and brake systems. Diagnostic procedure, routine maintenance, minor repair, adjustment and special tools will be studied.

### SVT 1003 SVT Electrical Theory

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

### SVT 1041 Math for Transportation I

Covers material designed for career and technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs, and/or finance. These are presented on an introductory level and the emphasis is on applications.

### SVT 1043 Physics for Transportation

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

## Courses required for this certificate: Semester 2

### SVT 1005 4-Stroke Engines

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

### SVT 1006 SVT Electrical Repair

Designed to expose students to the thought process required to correctly diagnose Sport Vehicle Electrical Systems as well as provide hands-on training to allow for learning of proper repair techniques.

### SVT 1007 SVT Drive Systems

Designed to introduce students to Drive components used on modern Sport Vehicles, including Transmission Assemblies, clutch components, Chain and Belt Drive Systems.

### SVT 1008 SVT Trade Practices

Designed to introduce students to the world of business development and ownership as related to the Sport Vehicle Industry.

### SVT 1042 Math for Transportation II

Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs, and/or finance. These are presented on an introductory level and the emphasis is on applications.

### SVT 1044 Transportation Communication

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

### SVT 2099 SVT Independent Study

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.

## Courses required for this certificate: Semester 3

### SVT 2001 Advanced Rolling Chassis

Designed to build on previous learning and focus student skills as related to the major chassis components of motorcycles. This class will provide advanced training in the servicing and repair of motorcycle frames, suspension, tire, wheel and brake systems. Diagnostic procedure, routine maintenance, major repair, adjustment and special tools will be studied. Hands-on lab activity and actual line work will be the focus of this advanced curriculum.

### SVT 2002 Advanced SVT Electrical Systems

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

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

Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of Sport Vehicle two and four stroke engine performance factors. Additionally, repair and renewal procedures, for Sport Vehicles are thoroughly explored.

## Courses required for this certificate: Semester 4

### SVT 2004 Simulated Shop Operation

Provides necessary training in general shop operations, including: documentation for basic business requirements, basic accounting techniques, shop insurance requirements, safety regulations, and customer relations. Provides necessary training in sport vehicle repair operation/shop format study including training in general vehicle diagnosis, repair, follow-up inspection, and performance analysis of Sport Vehicles.

### SVT 2080 SVT Internship

Focuses on student working at an approved job site related to the Sport Vehicle industry. The student will complete tasks and meet practical objectives as assigned by the employer and agreed upon by the student and instructor. An on-the-job learning experience at an approved Sport Vehicle related business.

## MOTORCYCLE SERVICE TECHNOLOGY ADVANCED TECHNICIAN CERTIFICATE

**Certificate Total:** Clock Hours: 1147.5 Credit Hours: 48

**Certificate Length:** 4 semesters

Additional costs may apply. All books, kits & supply costs are estimated. Cost, information, and classes are subject to change. Statistics present are based on the US Bureau of Labor Statistics. This certificate is eligible for Financial Aid. You may begin the Financial Aid process by completing your Free Application for Federal Aid (FAFSA) at [www.FAFSA.ed.gov](http://www.FAFSA.ed.gov). If you have further questions, please call (303)344-4910.