

SOUTHEAST COMMUNITY COLLEGE
ADVANCED TECHNOLOGIES & SKILLED TRADES DIVISION
POWERSPORTS TECHNOLOGY
COURSE SYLLABUS
December 10, 2025

I. CATALOG DESCRIPTION

Course Number: MSTT1040
Course Title: ATV & UTV Systems
Prerequisite(s): AUTT1007, AUTT1016, AUTT1026 & AUTT1110

Catalog Description: ATV and UTV update and review covering all systems and diagnosis relating to ATV and UTV vehicles.

Credit Hours: 3.0
Class Hours: 15
Lab Hours: 90
Total Contact Hours: 105

II. COURSE OBJECTIVES: *Course will:*

- A. Cover working safely in a shop.
- B. Cover repair orders.
- C. Cover communicating with customers.
- D. Cover engine condition.
- E. Cover fuel related problems.
- F. Cover ignition systems.
- G. Cover four-wheel drive systems.
- H. Cover engine, transmission and drive line adjustments.
- I. Cover chassis adjustments.
- J. Cover test driving the vehicle.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

- 1. Explain the necessity for working in a shop safely and maintaining a clean and safe working environment.
- 2. Properly complete a vehicle repair order with required information and customer signature.
- 3. Communicate with the customer in a manner which allows them to learn all pertinent information in order to diagnose vehicle problems.
- 4. Determine driveline and four-wheel drive mechanical electrical systems.
- 5. Determine fuel related problems and procedures necessary to repair them.
- 6. Determine ignition systems problems and proper methods used in adjustment; perform needed action.
- 7. Correctly use various diagnosis equipment to obtain drivability information from the engine, chassis, transmission, or driveline.
- 8. Properly perform required engine mechanical adjustments.

9. Properly perform required chassis adjustments.
10. Properly test drive the vehicle to obtain information necessary to prepare the vehicle for delivery to the customer.

B. GENERAL EDUCATION LEARNING OUTCOMES:

GELO 3: Critical Thinking & Problem Solving

Outcomes:

1. Collect, identify, interpret and analyze data.
2. Synthesize information to arrive at reasoned solutions to problems.
3. Evaluate ideas presented in writing, medial, speech, or artistic presentations.
4. Evaluate the validity of arguments, alternatives, data, outcomes and/or impacts of actions.
5. Acquire and integrate knowledge and construct relationships across disciplines.

IV. CONTENT/TOPICAL OUTLINE

- A. Shop safety
- B. Customer communications
- C. Fuel system diagnosis and adjustment
- D. Engine, transmission and driveline adjustments
- E. Ignition system diagnosis and adjustment
- F. Test equipment
- G. Test ride

V. INSTRUCTIONAL MATERIALS

Required Text(s): Modern Motorcycle Technology with workbook, Edward Abdo

VI. METHODS OF PRESENTATION

A. Methods of presentation typically include a combination of the following:

1. Lecture
2. Small and large group discussions
3. Video presentation
4. Slides
5. Demonstrations
6. Observation
7. Handouts
8. Guest speakers

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. Average test scores
2. Skill exhibit

VIII. SPECIFIC COURSE REQUIREMENTS

A. Average of accumulative test scores must be a minimum of 70%.