ACR 5 (Putting theory into practice: Observing and analyzing electrical troubleshooting problems with an A/C unit.)
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate lab practices, concepts and theories by troubleshooting a faulty air conditioning unit with the use of a wiring schematic and voltmeter.
- After finding the problem they will run the unit and make sure it is operating at the manufacturer’s specifications.

ACR 6 (Putting electrical theory into practice: Test and examine the operation of air conditioning relay)
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate lab practices, concepts and theories by observing and testing the proper operation of an air conditioning electrical control relay.

ACR 23 (Putting theory into practice: Checking the correct operation of low temp walk-in freezer.)
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate lab practices, concepts and theories to an operating low temperature walk-in freezer.
- Students will check proper freezer temperatures, amperage draw on the operating compressor, sub-cooling and superheat temperatures.

ACR 25 (Putting theory into practice: Checking the correct operation of a 2 ton 13 SEER Package A/C Unit.)
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate lab practices, concepts and theories to an operating 2 ton 13 SEER Air Conditioning Package Unit.
- Students will take air temperature readings, compressor amperage draw, sub-cooling and superheat readings and apply the data to the appropriate lab exercise.

ACR 27 (Putting theory into practice: Checking the correct operation of a High Efficiency Gas Furnace)
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate lab practices, concepts and theories to an operating High Efficiency Gas Furnace.
- Students will take gas pressure readings with a manometer and record the readings with the appropriate lab assignment and compare the reading with manufacturer’s specifications.

**ACR 30 (Putting theory into practice: Checking the correct operation of an air conditioning electric control board.)**
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate lab practices, concepts and theories to an operating Air Conditioning Control Board.
- Students will check an A/C wire schematic for proper wiring of the board and energize the board taking electrical readings at each control device.

**ACR 32 (Putting theory into practice: Check the calibration and operation of a pneumatic thermostat.)**
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate lab practices, concepts and theories to a pneumatic thermostat.
- Students will calibrate the thermostat to the manufacturer’s specification and check the proper operation of thermostat and the pneumatic actuator.

**ACR 34 (Putting theory into practice: Use communicating skills to calm down an irate customer.)**
- After reading the textbook and participating in class discussions, students will apply their knowledge of appropriate communicating skills to calm down an irate customer who is complaining that it took too long for him to get to the job and is very hot due to an air conditioning system not cooling.

**ACR/P 1 (OSHA Regulations)**
- Given an in-class writing task based upon assigned readings and classroom discussions, students will be able to identify the correct respirator for a hypothetical proposed situation, and define and explain the related OSHA regulations that apply to the situation.

**AJ 100 (Criminal Justice Paragraph)**
- By the end of this course, students will understand the concept of the criminal justice system and be able to identify its various components.

**AJ 100 (Police Functions)**
- By the end of the course, student will be able to describe the basic structure of a policing agency and explain its component functions such as patrol, criminal investigation and administrative support functions.

**AJ 115 (Community and Human Relations)**
• Given instruction and participation in discussions on the concepts of formal and informal power groups, students will successfully compare and contrast these concepts and correctly identify the similarities and differences.

AJ 130 (Criminal Procedures)
• Given instruction and participation in discussions on the criminal justice process from point of arrest to jury verdict, students will be able to list and explain each step of this process.
• Furthermore, students will be able to demonstrate how the fundamental American legal principles of burden of proof and standard of proof apply in a criminal trial.

AJ 131 (Rules of Evidence)
• Given an in-class writing task based on assigned readings and classroom discussions, students will be able to locate and identify a rule of evidence in a hypothetical fact situation, define and explain that rule, and correctly apply that rule to that fact situation.

AJ 135 (Writing the Police Report)
• Given a set of instructions on criminal justice report writing structure, style, format and content requirements, and given instruction on basic sentence structure, and after viewing a simulated crime fact situation, students will be able to accurately record facts from that scenario and write a grammatically correct report with no factual errors using the correct format and filling out appropriate forms completely.

AJ Program (Program Level)
• Students successfully completing administration of justice program, whether in the certificate program, transfer program or degree program, will acquire and be able to use specific knowledge and skills relating to the criminal justice discipline and will be able to apply those skills to specific job requirements.

AJ Program (Program Level) (Cont’d)
• Students in the administration of justice program are instructed in ethical decision making in problem solving and are expected to exhibit ethical values and take personal responsibility in coursework attempted.
• Faculty with many years of experience maintain professional contacts with industry representatives and are able to channel motivated and qualified students into internships; those students will be able to apply classroom theory to real world situations.
• Moreover, students, after receiving instruction and mentoring from faculty, will be able to challenge themselves by competing in selection processes for positions in the criminal justice field.

ATEC (Program Level)
• Upon completion of a course of study in ATEC, The student will develop knowledge and skills for job entry positions in the automotive field.
• Upon completion of a course of study in ATEC, the student working in the field will develop updated knowledge and skills in the automotive field.

**CADD 31abcd (Solid Modeling with CATIA V5)**
• Given a fully dimensioned multi-view engineering drawing of a machined part, utilize the appropriate functions within the CATIA V5 software to construct a 3D solid model of the part.

**CADD 47 and 49 (Program Level)**
• Upon Completion of this discipline’s course of study, the student will be able to utilize CADD software to create and interpret engineering drawings at an industry entry skill level.

**CADD 47 and 49 (Program Level)**
• Upon Completion of this discipline’s course of study, the student will be able to utilize CADD software to create and manipulate 3D solid models of detail parts and assemblies at an industry entry skill level.

**CADD 47 and 49 (Program Level)**
• Upon Completion of this discipline’s course of study, the student will be able to function as a member of a product development team.

**CNST 107abcd (Conversion of Rough Lumber to Square, Useable Material)**
• Presented with a piece of stock in rough condition, student will utilize correct squaring procedures to produce material that is square on all six surfaces.

**CNST 108abcd (Design and build an advanced cabinet project)**
• Utilizing skill and knowledge obtained in prerequisite courses, design and construct an advanced woodworking project.

**CNST 109abcd (Hinge Mortising)**
• Set up the Ecopress for hinge mortising and insertion of Euro-style hinge in door for face frame application.

**CNST 110 (Concrete Formwork)**
• Given a lab assignment based on a dimensioned residential foundation plan, demonstrate appropriate and competent construction methods that conform to standard industry practice, meet building code requirements, and are technically correct to within 1/8" in terms of dimensions, plumb, level, square, and alignment.

**COSM 1 (Written Exam given as a Final: Describe and List the Nine Color Application Procedures and Describe the Steps Required to Complete the Service.)**
• Given demonstrations, instruction in procedures, lab practice in all required applications, the student will be able to list and describe basic procedures for all required hair-color applications required for the State Board licensure exam.

**COSM 1 (Practical Test: Permanent Wave Procedure using Actual Chemical Materials and Following the Manufacturer’s Directions.)**
- The student will complete a permanent wave on a manikin using actual permanent wave chemicals.
- They will read and follow the manufacturer’s instructions.
- Set up their work area and equipment following the guidelines presented in the lesson.
- All methods and performance are to the criteria set forth by the state board of barbering and cosmetology.

**COSM 1 (Haircutting Techniques by using Implements Including Scissors, Razors and Clippers)**
- The students will perform haircutting techniques on manikin heads and clients using razors, scissors and clippers.

**ECHT 110 (Using Circuit Simulation Software to analyze simple DC and AC Circuits)**
- Students will use a Electronic Simulation Software Package (similar to Multi-Sim or Spice) to supplement both the understanding and analysis of Direct and Alternating Current Circuits.

**ECHT 11 (Program Level) (Digital Multimeter (DMM) Measurement Techniques)**
- This learning activity introduces and reinforces techniques that the student will use to measure: AC/DC Voltages and Currents, and Resistance, using both a Bench and Portable DMM.

**ECHT 110 (Program Level) (Digital Multimeter (DMM) Measurement Techniques)**
- This learning activity introduces and reinforces techniques that the student will use to measure: AC/DC Voltages and Currents, and Resistance, using both a Bench and Portable DMM.

**ETEC 10 (Engineering Technology Career Research)**
- Students will research engineering and engineering technology careers

**ETEC (Program Level)**
- Upon completion of the courses in this discipline, the student will be able to identify the phases of a product lifecycle.
• Upon completion of the courses in this discipline, the student will be able to create a list of tests that a new product should be subjected to.

**FASH 10ab (Demonstration of Beginning Sewing Techniques)**
• Student will demonstrate knowledge of basic sewing techniques by completing a technique notebook with swatches of various techniques with a graded score of C or better.

**FASH 11ab (Fashion 11ab)**
• Students will demonstrate knowledge of techniques for basic sewing elements, including zippers, bound button holes, blind stitch hems, etc.

**FTEC 1 (Fire Protection Organization)**
• The student will be able to identify a minimum of three fire protection career opportunities and the skills and training needed.

**FTEC 1 (Fire Prevention Technology)**
• The student will be able to define the historical fire problem and progress of fire prevention in the United States.

**FTEC 4 (Fire Company Organization and Management)**
• The student will be able to identify 3 styles of leadership.

**FTEC 5 (Recognize the Basic Terms and Concepts Related to Fire Behavior and Chemistry)**
• After the course of instruction the student will be able to recognize the terms and concepts related to fire behavior and chemistry.

**FTEC 5 (Fire Behavior and Combustion)**
• The student will be able to identify the 3 physical states of matter and their physical properties.

**FTEC 6 (Building Construction for the Fire Service)**
• The student will be able to identify the 5 types of building construction.

**FTEC 7 (Fire Protection Engineering)**
• The student will be able to calculate the water flow for fire protection systems in buildings.

**FTEC 8 (Fire Service Hydraulics)**
• The student will be able to define friction loss and the factors that influence friction loss.

**FTEC 9 (Fire Apparatus and Equipment)**
• The student will be able to identify and describe the four major types of aerial apparatus in terms of their operational characteristics.

**FTEC 10 (Describing the role of the Hazmat First Responder)**

• After the course of instruction the student will be able to describe the role of the First Responder.

**FTEC 10 (Hazmat First Responder Role)**

The student will be able to identify the role of the First Responder.

**FTEC 14 (Applied Science for Fire Protection)**

• The student will be able to calculate how many electrically operated fire tools and appliances can be operated from a mobile generator or from an AC current outlet on a fire apparatus.

**FTEC 19 (Fire Service Entrance Preparation)**

• The student will be able to identify a minimum of three types of entrance exams.

**FTEC 20 (Fire Protection Equipment & Systems)**

• The Students will be able to identify a minimum of four types of sprinkler systems.

**MTEC (Program Level)**

• Upon completion of the courses in this discipline, the student will be able to identify the differences between open and closed loops control methods.
• Upon completion of the courses in this discipline, the student will be able to identify different digital and analog sensor technologies.

**MTT 101abcd (Precision Measurement with a Micrometer)**

• Given a ground steel block of known and verified dimensions, measure and record the three dimensions of the block using a micrometer to a precision of 0.001 inches.

**MTT 103abcd (Precision Turning Demonstration)**

• Students will turn a part on the lathe to a given drawing dimension to an accuracy of +/- .001 inches.

**MTT 105abcd (Precision Milling and Stock Squaring)**

• Given a rough-cut aluminum block, the student will square the block using a milling machine, cutters and measurement tools.

**MTT 107abcd (Comparison of Advanced Manufacturing Cutting Processes)**

• Record the benefits and downsides of the following processes: Water-jet cutting, EDM wire cutting, Plasma cutting and Laser cutting.
**WELD 1 (Production of Quality Beads)**
- Welding students will produce quality beads utilizing various welding techniques.

**WELD 1 (Safe Set Up and Operation of Welding Equipment)**
- Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 1 (Basic Knowledge of Welding Concepts)**
- Students will be able to demonstrate basic knowledge of welding concepts.

**WELD 1 (Production of Quality Welds)**
- Welding students will produce quality welds utilizing various welding techniques.

**WELD 2abc (Production of Quality Beads)**
- Welding students will produce quality beads utilizing various welding techniques.

**WELD 2abc (Safe Set Up and Operation of Welding Equipment)**
- Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 2abc (Basic Knowledge of Welding Concepts)**
- Students will be able to demonstrate basic knowledge of welding concepts.

**WELD 2abc (Production of Quality Welds)**
- Welding students will produce quality welds utilizing various welding techniques.

**WELD 15ab (Production of Quality Beads)**
- Welding students will produce quality beads utilizing various welding techniques.

**WELD 15ab (Safe Set Up and Operation of Welding Equipment)**
- Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 15ab (Basic Knowledge of Welding Concepts)**
- Students will be able to demonstrate basic knowledge of welding concepts.

**WELD 15ab (Production of Quality Welds)**
- Welding students will produce quality welds utilizing various welding techniques.

**WELD 21 (Production of Quality Beads)**
- Welding students will produce quality beads utilizing various welding techniques.

**WELD 21 (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 21 (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts.

**WELD 21 (Production of Quality Welds)**
• Welding students will produce quality welds utilizing various welding techniques.

**WELD 23abc (Production of Quality Beads)**
• Welding students will produce quality beads utilizing various welding techniques.

**WELD 23abc (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 23abc (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts.

**WELD 23abc (Production of Quality Welds)**
• Welding students will produce quality welds utilizing various welding techniques.

**WELD 27abc (Production of Quality Beads)**
• Welding students will produce quality beads utilizing various welding techniques.

**WELD 27abc (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 27abc (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts

**WELD 27abc (Production of Quality Welds)**
• Welding students will produce quality welds utilizing various welding techniques.

**WELD 40abcd (Production of Quality Beads)**
• Welding students will produce quality beads utilizing various welding techniques.

**WELD 40abcd (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 40abcd (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts

**WELD 40abcd (Production of Quality Welds)**
• Welding students will produce quality welds utilizing various welding techniques.

**WELD 45ab (Production of Quality Beads)**
• Welding students will produce quality beads utilizing various welding techniques.

**WELD 45ab (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 45ab (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts

**WELD 45ab (Production of Quality Welds)**
• Welding students will produce quality welds utilizing various welding techniques.

**WELD 50 (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 50 (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts

**WELD 50 (Production of Quality Welds)**
• Welding students will produce quality welds utilizing various welding techniques.

**WELD 95abcd (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 95abcd (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts.

**WELD 99abc (Safe Set Up and Operation of Welding Equipment)**
• Students will be able to demonstrate the safe set up and operation of welding equipment using all applicable personal protective equipment.

**WELD 99abc (Basic Knowledge of Welding Concepts)**
• Students will be able to demonstrate basic knowledge of welding concepts.

**WELD 99abc (Production of Quality Welds)**
• Welding students will produce quality welds utilizing various welding techniques.