

## Transportation, Distribution & Logistics Cluster

### Automotive Collision Repair –

**Combination Collision Repair Technician** – Students in this major will learn how to complete non-structural collision repair and automotive refinishing. The courses that will be covered include non-structural damage analysis and minor dent repair, plastics repair, all aspects painting and refinishing. Students will also learn how to use various tools in repairing damage and to remove and install handles, moldings, trim, and bolted body parts. In addition, the student will learn to MIG weld industry standard joints following I-CAR standards. This career major also includes painting preparation, sanding processes, color matching and adjusting color, removing and installing glass, and the process of written estimates. Students will learn about handling, storage and disposal of hazardous materials and selecting proper personal protective equipment and maintenance. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

**Refinishing Technician** – Students in this major will learn how to perform vehicle refinishing which will include both complete and partial vehicle refinishing. Students will learn about handling, storage and disposal of hazardous materials and selecting proper personal protective equipment and maintenance. Students will cover preparation of a vehicle for refinishing; mixing and applying refinish material as well as adjust paint colors. They will learn how to remove and install handles, locks, molding and trim, the proper techniques for sanding, proper use of a spray-gun, sealers and top-coats, color matching and adjustment and masking techniques that are used for blending. In addition, they will also learn how to determine the cause and corrective action for refinishing defects and failures. Interior/exterior detailing will also be covered. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

**Non-Structural Repair Technician** – Students in this major will learn skills in basic collision repair including damage analysis to determine necessary repair procedure. Students will cover the operation of tools and personal safety equipment maintenance. They will learn how to use metal straightening tools to repair minor dents and dings in sheet metal as well as metal shrinking and stretching techniques. Students will also learn the techniques for mixing and applying body filler, selecting the proper sandpaper and sanding equipment, techniques for properly sanding the cured body filler to original contour, and how to prepare the repair for primer. Also included is the removal and installation of handles, trim, moldings and locks. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

**Structural Repair Technician** – Students in this major will learn how to do structural repair using several techniques, including how to repair and replace and section structural members found in the vehicle. Students will cover the operation of tools and personal safety equipment maintenance. In addition, students will also learn how to inspect and identify the damage to a vehicle. They will learn how to use metal straightening tools to repair minor dents and dings, several techniques for cutting sheet metal and structural parts, and metal shrinking and stretching techniques. Welding, including MIG, STRSW, and aluminum MIG welding will also be covered.

In addition, students will learn the importance of the alignment of steering and suspension components for a properly working vehicle in addition to learning how to assess, remove, and replace worn parts. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

**Damage Appraiser/Estimator** – Students in this major will learn to inspect a damaged vehicle and correctly identify all damage. They will also learn how to write an accurate damage report by collecting the pertinent information from the customer and the vehicle. In addition, students will also learn to prepare a damage report using computer estimating systems and compare computerized estimates to manual hand written estimates. Students will also learn how to import digital pictures for documentation. The hours completed in this major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.

**Detailing Specialist** – Students in this major will learn to complete the refinishing repair by polishing the refinish material after curing. Tools and equipment, safety, hazardous material handling and storage will also be covered in this major. Students will learn color sanding techniques to remove surface defects and the selection of the proper polishing products. In addition, the students will learn to prepare the vehicle for delivery by washing and cleaning interior and exterior of the vehicle. The hours completed in this major count toward the hours required to be eligible for ASE certification.

**Glass Replacement Specialist** – Students in this major will learn to remove and install stationary and movable glass. They will learn to use various specialty tools that are used to remove and install glass and they will be able identify types of automotive glass. Trouble shooting movable glass mechanisms will also be covered, along with properties and characteristics of primers, adhesives and sealants. In addition, students will also cover removing and installing locks and trim. The hours completed in this major count toward the hours required to be eligible for ASE certification.

**Automotive Collision Workforce Transition** – Students must complete an automotive collision repair major prior to enrolling in this one. In this major the students will learn leadership, personal development and employability skills. Also included in the major is a Work-Site Experience (WSE) that is planned, organized, and conducted at the student's place of employment that will be used to broaden skills and increase effectiveness and productivity. In addition, a formalized mentor-ship will be included and based on the instructional process for the purpose of accelerating the student's skill development and individual transition into the workforce.

**Body Mechanical/Electrical Technician** – Students in this major will learn to identify steering and suspension components and the components of air conditioning and cooling systems. They will learn how to identify worn or damaged parts and the proper techniques to remove and replace the components. They will also learn basic electrical theory, including how to evaluate and check electrical systems that are most often damaged in collision. Students will also learn to identify and inspect restraint and Supplemental Restraint Systems (SRS), including looking for damage that can occur. Students will also learn to identify damage to mechanical areas including brakes and drive train and how to remove and replace damaged part. The hours completed in this

major are aligned with ASE/NATEF standards, and ASE certification is recommended and industry recognized.