

# REPAIRING PLASTIC

## Pierce County Careers Connection Dual Credit Articulation Agreement

Upon completion of high school courses equivalent to the following competencies:

- Identify Various Plastics  
 Given oral discussion and/or practical application problems, and/or a written test, and appropriate reference materials, identify various plastic:
  - Thermostat
  - Thermoplastic
  - Composite
  - Sheet molded compounds
  - Fiber reinforced plastics
- Make a One-sided ABS Weld  
 Given an airless plastic welder, make a one-sided ABS weld using accompanying equipment, ABS materials and appropriate personal safety equipment.  
 Demonstrate appropriate use of the following tools:
  - Plastic cleaner
  - Aluminum body tape
  - Plastic squeegee or paint paddle
  - Die grinder
  - ¼ inch drill with cutter bit
  - Small grinder
  - Rotary file
  - Slow speed grinder and #80 grit disc or single edged razor blade
  - #320 grit sandpaper

*All procedural steps must be followed; finished panel/product must be secure; contours must be smooth.*
- Make a Two-sided Polypropylene Weld  
 Given an airless plastic welder, make a two-sided polypropylene weld using accompanying equipment, polypropylene materials and appropriate personal safety equipment.  
 Demonstrate appropriate use of the following tools:
  - Plastic cleaner
  - Aluminum body tape
  - Plastic squeegee or paint paddle
  - Die grinder
  - ¼ inch drill with cutter bit
  - Small grinder
  - Rotary file
  - Slow speed grinder and #80 grit disc or single edged razor blade

*All procedural steps must be followed; finished panel/product must be secure; contours must be smooth.*
- Make a Two-sided Weld on a Urethane Bumper Cover  
 Given an airless plastic welder, make a two-sided weld on a urethane bumper cover using accompanying equipment and appropriate personal safety equipment.  
 Demonstrate appropriate use of the following tools:
  - Plastic cleaner
  - Aluminum body tape
  - Plastic squeegee or paint paddle
  - Die grinder
  - ¼ inch drill with cutter bit
  - Small grinder
  - Rotary file
  - Slow speed grinder and #60 or #80 grit disc
  - Flexible filler
  - #180 or #220 grit sandpaper

*All procedural steps must be followed; finished panel/product must be secure; contours must be smooth.*
- Make a Two-part Repair of a Polyolefin Bumper Cover with Backside Reinforcement  
 Given bumper cover requiring repair, make a two-part epoxy repair of a polyolefin bumper cover with backside reinforcement using accompanying equipment and appropriate safety equipment.  
 Demonstrate appropriate use of the following tools:
  - Plastic cleaner
  - Slow speed grinder and a 3-inch #36 grit disc
  - Sander
  - (#80, #180, and #240) grit sandpaper
  - Adhesion promoter
  - Flexible epoxy adhesive or urethane based materials
  - Squeegee or plastic spreader
  - Fiberglass cloth
  - Safety goggle or glasses with side shields
  - Work gloves

*All procedural steps must be followed; cover will appear smooth, and ready for finish.*

A student earning a "B" grade or better may earn college credit at the following college:

<u>College</u>	<u>Course</u>	<u>Credits</u>
Bates Technical College	AUTOB 207	2
	AUTOB 208 (CIP Code: 470603)	5