

Collision Repair Technology

Recommended High School Courses/Levels

- Reading level 11.2
- Math Courses
 - Algebra I – First year
 - Geometry – Second year
 - Algebra II – Third year
- Science Courses
 - Chemistry - First year
 - Biology - Second year

**relates to student's years in program at ICTC and expectations during that year*

**detailed list of math skills noted in academic skills*

Recommendations for Success

- Good mechanical aptitude
- Flexible and able to work in specified areas
- Manual dexterity
- Physical stamina/able to lift 60 pounds
- Discrimination by size/shape
- Discrimination by touch
- Structural mechanical visualization/reasoning
- Retention of mechanical and structural detail
- Excellent eye-hand coordination
- Strong reading, math, and computer skills
- Restoring uni-body automobiles to their original form
- Follow instructions and diagrams in technical manuals in order to make precise three-dimensional measurements
- Good attendance/homework completion



**This document is strictly intended to provide an overview of the program and to be used as an informative tool. Essentials skills is a tool to assist districts, parents, and students in the decision making process for program decisions, transition planning, and possible placement here at ICTC.*

**This document is not intended to and should not be used as a screening tool for student placement.*

PPG Certified

PPG Industries



Indiana County Career and Technology Center	Program Area Collision Repair Technology
Objective of field	Collision Repair Technology students will have the opportunity to learn the skills to return a damaged vehicle to its original showroom quality finish. Collision Repair Technology students learn to apply automotive finishes in a state-of-the-art paint booth. They also learn the art of air brushing and customizing.
Classroom Tests	*CEP students – 12 for one semester First Year – 24 for the year Second Year – 24 for the year Third Year – 24 for the year *Career Exploration Program offered in 9 th grade
Certification Tests	PPG Certification Test PA Skills
Books	- I-Car Education Foundation – CD - Collision Repair Missouri Publications - Delmar Auto Body Repair - PPG Partners in Education Booklet and CD
Lecture Time	First Year and CEP students – 40 minutes, 2 times a week Second year – 40 minutes, 2 times a week Third year – 40 minutes, 2 times a week
Co-op/Clinical	- Instructors recommendation - ICTC requirements - CRT - Employability skills - Instructor recommendation
Homework	- Reading assignments - Research paper
Task Lists	CEP students – 31 per semester First Year– 42 for the year Second Year – 112 for the year Third Year – 63 for the year
Planned Courses	- Automobile Construction (First year) - Body Shop Safety Practices (First, second, and third) - Repair Techniques/Minor Repair (First, second, and third) - MIG welding (First, second, and third) - Repairing Automobile Panels (First, second, and third) - Detailing (First, second, and third year) - Refinishing (Second year) - Structural Repair (Third year) - Estimating (Third year)
Prerequisites	- Hand/eye coordination - Good mechanical aptitude - Manual dexterity - Discrimination by size/shape - Discrimination by touch - Structural mechanical visualization/reasoning
Academic Skills	<u>Reading Level 11</u> *Math Skills - Fractions (add, subtract, multiply, divide) - Decimals - Order of operations - Measurement - Proportions - Decimal/fractions/percent conversions - Solve equations - Linear measure in Standard and Metric units

	<ul style="list-style-type: none"> - Area, volume, proportions(mixing) - Ohm's Law - Percentage
Soft Skills	<ul style="list-style-type: none"> - Cooperative - Positive attitude - Strong work ethic - Observe safety - Work independently
Computer Skills	Basic (Internet, email, and Word)
Physical Requirements	<ul style="list-style-type: none"> - Flexible - Healthy - Able to work in specified areas
Vocational Testing Essential Aptitudes for lab recommended levels	<ul style="list-style-type: none"> - Structural mechanical visualization/reasoning - Discrimination by size/shape - Gross/fine motor skills - Discrimination by touch/color - Manual dexterity - Retention of mechanical and structural detail
Job Duties/Training	Collision Repair Technology students learn to apply automotive finishes in a state-of-the-art paint booth. Students also learn the art of air brushing and customizing. Students are taught cost estimating, frame straightening, MIG welding, reshaping metal parts and replacing body component parts.
Uniform Requirements	<ul style="list-style-type: none"> - Work boots - Uniforms (Student expense average \$60.00) - Safety Glasses (First pair is free)
Articulation/Agreements (refer to course catalog for more)	<p>Penn College 3-15 credits and application fee waved</p> <p>Full Year – 3 credits per year</p> <p>Wyo-Tech</p>
Employment/Job Outlook	<p>Technology in the collision industry is changing at lightning fast speeds. Keeping up with the technology and repair procedures offers plenty of opportunity to learn new skills and techniques. Not only will staying on top of technology increase job satisfaction, but will also continually improve job security and create new career opportunities.</p> <p>With a career in the collision industry, the opportunities are endless! One may find themselves in a management position; working for a collision center; self-employed; or working for international organizations, such as an insurer, equipment maker, paint company, or vehicle maker. Additional opportunities exist to teach at a career or technical school or college, instruct industry professionals, or conduct research and development for products or technical training.</p> <p>Previous surveys conducted every three years confirmed the need for a continual supply of qualified entry-level technicians, while also showing changes concerning business operations and the collision repair technician workforce. Although there is a wide distribution, annual income tends to increase with shop sales and volume and frequent training, especially I-Car classes. Average income for production technicians has again increased over the last couple of years. The average income for all technicians is \$51,312, competitive with similar skilled trades and higher than most. Average income among the top 10 percent was \$88,460, showing an attractive earning potential as a collision repair technicians. <i>Information obtained from I-Car Education Foundation, "Snapshot of Collision Industry"</i></p> <p>Career Opportunities</p> <ul style="list-style-type: none"> - Automotive Detailer - Collision Estimator* - Collision Repair Technician ~ - Automotive Refinisher ~ - Refinish Technician Assistant ~ <p>*Postsecondary education required ~ May or may not require postsecondary education</p>
How to find out more?	<p>http://www.ictc.ws/Secondary/at/p_home.htm</p> <p>US Department of Labor www.bls.gov</p> <p>http://corporateportal.ppg.com/ppg</p>

* National Occupational Competency Testing Institute