

## Program Number 31-405-1 Technical Diploma • Four Terms

### ABOUT THE PROGRAM

If you love cars and are seeking a career that offers challenging work, provides abundant opportunities for growth and advancement, and rewards hard work and dedication, think seriously about the auto collision industry. Pursuing a career in the collision industry can take your interests and talents to the next level by developing highly sought-after skills. There has never been a better time to consider a career in an industry with such excellent growth potential. Jobs in the collision industry will never be outsourced, and this job saves lives by returning safe and properly repaired vehicles to the road.

### PROGRAM OUTCOMES

- Straighten collision damaged sheet metal.
- Refinish automobile body parts.
- Replace non-structural panels and parts.
- Perform auto collision welding procedures.

### CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

LTC credits transfer to over 30 universities. For more information visit [gotoltc.edu/future-students/transfer](http://gotoltc.edu/future-students/transfer).

### ADMISSION AND PROGRAM ENROLLMENT STEPS

- Submit online application.
- Submit transcripts (high school & other colleges). NOTE: Official transcripts required for acceptance of transfer credits; Financial Aid may require.
- Complete the online Student Success Questionnaire.
- Schedule a Program Advising Session with your assigned advisor to plan your first semester schedule, review your entire plan of study, discuss the results of the Student Success Questionnaire.

### APPROXIMATE COSTS

- \$136.50 per credit tuition (WI resident) plus \$8.10 per credit student activity fee. \$10 per credit online or hybrid fee. Material fee varies depending on course. Other fees vary by program. Visit [gotoltc.edu/financial-aid/tuition-and-fees](http://gotoltc.edu/financial-aid/tuition-and-fees) for details.
- Students are eligible to purchase Snap-On tools as part of their tuition in Terms 1, 2 and 3 at an approximate total cost of \$2,300.

### FINANCIAL AID

This program is eligible for financial aid. Visit [gotoltc.edu/Financial-Aid](http://gotoltc.edu/Financial-Aid) or talk with your Career Coach about how to apply for aid.

### SPECIAL NOTE

- The program is accredited by NATEF (National Automotive Technicians Education Foundation).
- Students are prepared and take two of the I-CAR Welding Certifications. They are the MIG Steel and MIG Aluminum ICAR Welding Exams.
- Students are well prepared to take the ASE (Automotive Service Excellence) Exam.

### CONTACT

LTC Career Coach  
920.693.1162 • [CareerCoach@gotoltc.edu](mailto:CareerCoach@gotoltc.edu)

Catalog No.	Class Title	Credit(s)
<b>Term 1</b>		
31405320	Introduction to Auto Collision	1
31405322	Auto Collision Panel Repair	2
31405304	Auto Collision Electrical Mechanical	3
31405324	Auto Collision Plastic & Composite Panel Repair	2
31405326	Auto Collision Panel Replacement & Alignment	2
31801359	Communication Skills for the Workplace	2
		<b>12</b>
<b>Term 2</b>		
31405340	Introduction to Auto Refinishing	1
31405332	Auto Collision Wire Welding	2
31405342	Auto Refinishing Masking/Preparation	2
31405346	Auto Refinishing Color Matching/Blending	2
31405348	Auto Refinishing Water Borne Systems	2
31405344	Auto Refinishing Multiple Panel	2
31405311	Sheet Metal Fabrication	2
		<b>13</b>
<b>Term 3</b>		
32405333	Collision Center Best Practices	1
31405308	Collision Estimating & Repair Planning	2
32405313	Hybrid/Electric Vehicle Safety	1
32405325	Cycle Time and Shop Production 1	4
32405329	Cycle Time and Shop Production 2	4
		<b>12</b>
<b>Term 4</b>		
31405341	Structural Analysis	1
32405306	Vehicle Anchoring & Structural Repair	3
32405309	Structural Steel Replacement	3
31405347	Custom Painting	1
31405349	MIG Aluminum Welding & Panel Repair	3
32405317	Internship - Auto Collision	1
		<b>12</b>
		<b>TOTAL 49</b>

*Curriculum and Program Acceptance requirements are subject to change. Program start dates vary; check with your advisor for details. The tuition and fees are approximate based on 2019-2020 rates and are subject to change prior to the start of the academic year.*



**AUTO COLLISION ELECTRICAL MECHANICAL...**prepares the learner to examine and troubleshoot basic electrical circuits, interpret electrical circuit diagrams, service automotive batteries, lighting systems, and passive restraint systems. The learner will perform soldering and splicing of electrical components. Students will also learn how to diagnose and service automotive air conditioning systems and have the opportunity to become EPA certified. COREQUISITE: 31405320 Intro to Auto Collision

**AUTO COLLISION PANEL REPAIR...**provides the learner with hands-on activities to gain the skills necessary for metal finishing, panel straightening, application of body fillers, and use of hydraulics to straighten panels and make body panel adjustments. COREQUISITE: 31405320 Intro to Auto Collision

**AUTO COLLISION PANEL REPLACEMENT AND ALIGNMENT...**prepares the student to apply straightening, welding, restoring, corrosion protection, alignment, and panel replacement skills. COREQUISITE: 31405320 Intro to Auto Collision

**AUTO COLLISION PLASTIC AND COMPOSITE PANEL REPAIR...**prepares the learner to work on repairing damaged plastic panels using adhesives and airless welding techniques. The repair of SMC, FRP, ABS, TPO, and other popular plastics are taught. COREQUISITE: 31405320 Intro to Auto Collision

**AUTO COLLISION WIRE WELDING...**introduces the learner to information and skills necessary to safely operate gas metal arc welding, aluminum welding, and oxyacetylene cutting as it applies to auto collision. Upon completion, the student is prepared to take the I-CAR steel weld qualification test. COREQUISITE: 31405340 Intro to Auto Refinishing

**AUTO REFINISHING COLOR MATCHING/BLENDING...**prepares the student with an understanding of color movement using the color wheel and the differences in spray gun technique as it applies to blending and how to solve paint color matching problems. COREQUISITE: 31405340 Intro to Auto Refinishing

**AUTO REFINISHING MASKING/PREPARATION...**enhances the learner's ability to understand automotive finishes and the equipment, paint area, and refinish area and to develop a thorough understanding of surface preparation as it relates to vehicle refinishing. COREQUISITE: 31405340 Intro to Auto Refinishing

**AUTO REFINISHING MULTIPLE PANEL...**provides the learner with the skills to spray complete panels and vehicles using the latest spray technology and equipment, troubleshoot paint problems, and detail the finish to a preaccident condition. COREQUISITE: 31405344 Intro to Auto Refinishing

**AUTO REFINISHING WATER BORNE SYSTEMS...**provides the learner with specific knowledge and skills necessary to work with water borne products. Learners will be introduced to application methods, mixing and other considerations unique to water borne refinishing systems. COREQUISITE: 31405340 Intro to Auto Refinishing

**AUTOMOTIVE SHEET METAL FABRICATION...**prepares learners to develop metal-working skills to the next level in this advanced auto-body course. Students will learn to shape steel vehicle panels using the English wheel, power hammer, and bead roller as well as other metal shaping tools. Learners have the opportunity to create their own unique parts and designs. COREQUISITE: 31405340 Intro to Auto Refinishing

**COLLISION CENTER BEST PRACTICES...**provides learners with the knowledge and skills needed to provide excellent customer service. Learn skills to identify and resolve concerns in a professional manner. Build positive customer relationships for collision repair businesses. PREREQUISITE: 32405348 Auto Rfnshg Water Borne Syst

**COLLISION ESTIMATING AND REPAIR PLANNING...**introduces the learner to various damage appraisal methods and provides the skills necessary to create computerized estimates and work orders with an emphasis on customer service. PREREQUISITE: 31405348 Auto Refinishing Water Borne Systems

**COMMUNICATION SKILLS FOR THE WORKPLACE...**prepares the student to develop paper job-search tools and job-related writing skills to increase job stability; introduces the students to team-building skills to resolve organizational problems; introduces the student to the skills of effective listening; prepares the student to respond to workplace criticism and praise; and introduces the student to interpersonal relationship skills, including effective interviewing skills, customer relations, and management/employee relations.

**CUSTOM PAINTING...**introduces the learner to many popular custom painting techniques. Students will have an overview of hand painted pinstripe applications, multi-stage candy coat finishes, using an airbrush, masking methods, and equipment cleaning and maintenance. PREREQUISITE: 31405332 Auto Collision Wire Welding

**CYCLE TIME AND SHOP PRODUCTION 1...**prepares learners to enter the workforce by applying their practical skills and performing live customer work. This course reinforces the team approach as it applies to shop production and repair work performed by students and will be assessed using real-world criteria. PREREQUISITE: 32405348 Auto Refinishing Water Borne Systems

**CYCLE TIME AND SHOP PRODUCTION 2...**learners prepare to enter the workforce by applying their practical skills and performing live customer work. This course reinforces cycle time and shop production by performing vehicle repairs using specialized cells and the assembly line method. Repair work performed by students will be assessed using real-world criteria. PREREQUISITE: 32405348 Auto Refinishing Water Borne Systems

**HYBRID/ELECTRIC VEHICLE SAFETY...**provides the learner with the knowledge and skills necessary in order to properly and safely repair vehicles equipped with high voltage systems. Learners will shut down and initiate high voltage vehicle systems, assess damaged components unique to hybrid and electric vehicles and learn the fundamentals of how hybrid and electric vehicle systems operate. PREREQUISITE: 32405348 Auto Refinishing Water Borne Systems

**INTERNSHIP - AUTO COLLISION...**requires students to complete 72 hours (1 credit) of work in an automotive collision repair facility. Students are responsible for seeking and obtaining the internship position. Course requirements include maintaining a log of work activities, identifying and receiving approval from the job supervisor and instructor, and completing a work-related project. Students may meet periodically at LTC. PREREQUISITE: 32405329 Cycle Time & Shop Production 2

**INTRODUCTION TO AUTO COLLISION...**introduces the learner to the auto collision course procedures, practices, and grading policy and develops safe work habits and attitudes. Many of the hand and power tools are identified.

**INTRODUCTION TO AUTO REFINISHING...**introduces the learner to auto collision and refinishing course procedures, practices, and grading policy and develops safer work habits and attitudes. COREQUISITE: 31405320 Intro to Auto Collision

**MIG ALUMINUM WELDING AND PANEL REPAIR...**provides the learner with skills to complete repair procedures unique to vehicles with aluminum structures using specialty tools and methods. OEM repair methods from major automotive manufacturers are taught and assessed in this course. Learners have the opportunity to earn the I-CAR WCA03 Aluminum Weld Test Certification. PREREQUISITE: 31405332 Auto Collision Wire Welding

**STRUCTURAL ANALYSIS...**provides the learner with knowledge and hands-on experiences in measuring and analyzing vehicle frames, structures, and body panels using tape measures, tram and self-centering gauges. Vehicles are also measured with mechanical and computerized measuring systems. Some vehicle structural damage may be repaired in this course if time and appropriate type of damaged vehicle is available. Students will compile a portfolio to showcase projects and accomplishments. PREREQUISITE: 31405332 Auto Collision Wire Welding

**STRUCTURAL STEEL REPLACEMENT...**prepares the student to apply steel mig welding skills combined with steel sectioning methods to perform proper steel sectioning procedures. Learners will perform sectioning procedures approved by OEM manufacturers and prepare to earn the I-CAR SPS05 Steel Sectioning Certification. PREREQUISITE: 32405332 Auto Collision Wire Welding

**VEHICLE ANCHORING AND STRUCTURAL REPAIR...**provides the learner with skills to use state of the art Car-O-liner equipment such as the Evolution jig type anchoring systems and the B73 truck clamp system to properly anchor vehicles for structural repairs. Learners will gain valuable experience using the Car-O-Liner vision electromechanical measuring system. Structural repairs will be made to vehicles according to OEM guidelines. PREREQUISITE: 32405332 Auto Collision Wire Welding