

# Washtenaw Community College Comprehensive Report

## CRT 223 Collision Technician II

Effective Term: Winter 2014

### Course Cover

**Division:** Advanced Technologies and Public Service Careers

**Department:** Automotive Body

**Discipline:** Collision Repair Technician

**Course Number:** 223

**Org Number:** 14110

**Full Course Title:** Collision Technician II

**Transcript Title:** Collision Technician II

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** Course Change

**Change Information:**

Course discipline code & number

Course description

Credit hours

Total Contact Hours

Pre-requisite, co-requisite, or enrollment restrictions

Outcomes/Assessment

Objectives/Evaluation

**Rationale:** Because of the length of the advanced certificate programs, student success and completion rates have been below expectations. With students unable to complete all courses because of limited offerings we are revising the program. We are combining material from CRT 221 and CRT 261 into one course and reducing the number of credit hours in the program.

**Proposed Start Semester:** Winter 2014

**Course Description:** In this course, students will be introduced to outer panel replacement including quarter panels, box sides, door skins, rocker sections, core supports, and various other weld-on panels. Selection and proper application of tools and equipment will be emphasized. This course contains material previously taught in CRT 221 and CRT 261.

### Course Credit Hours

**Variable hours:** No

**Credits:** 4

**Lecture Hours:** Instructor: 60 Student: 60

**Lab:** Instructor: 45 Student: 45

**Clinical:** Instructor: 0 Student: 0

**Total Contact Hours:** Instructor: 105 Student: 105

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

### College-Level Reading and Writing

College-level Reading & Writing

### College-Level Math

## **Requisites**

### **Prerequisite**

CRT 203 minimum grade "B"; may enroll concurrently

## **General Education**

### **Request Course Transfer**

Proposed For:

## **Student Learning Outcomes**

1. Determine outer panel replacement and perform repairs based on diagnosis of damage.

### **Assessment 1**

**Assessment Tool:** Final Exam and Student Achievement Record

**Assessment Date:** Spring/Summer 2015

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** all

**Number students to be assessed:** all

**How the assessment will be scored:** Departmentally-developed rubric and answer key

**Standard of success to be used for this assessment:** 80% of the students will score 80% or higher on the final exam and achievement record.

**Who will score and analyze the data:** Departmental faculty

2. Properly evaluate electrical and mechanical components in repair procedure and perform repairs.

### **Assessment 1**

**Assessment Tool:** Final Exam and Student Achievement Record

**Assessment Date:** Spring/Summer 2015

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** all

**Number students to be assessed:** all

**How the assessment will be scored:** Departmentally-developed rubric and answer key

**Standard of success to be used for this assessment:** 80% of the students will score 80% or higher on the final exam and achievement record.

**Who will score and analyze the data:** Departmental faculty

3. Determine and perform disassembly/assembly of welded structural components using proper repair techniques.

### **Assessment 1**

**Assessment Tool:** Student Achievement Record and Final Exam

**Assessment Date:** Spring/Summer 2015

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All

**Number students to be assessed:** All

**How the assessment will be scored:** Departmentally-developed rubric and answer key

**Standard of success to be used for this assessment:** 80% of the students will score 80% or higher on the exam and achievement record.

**Who will score and analyze the data:** Departmental faculty

4. Demonstrate ability to identify repairable metals to determine repair or replacement requirement.

### **Assessment 1**

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**Assessment Date:** Spring/Summer 2015

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All

**Number students to be assessed:** All

**How the assessment will be scored:** Departmentally-developed rubric and answer key

**Standard of success to be used for this assessment:** 80% of the students will score 80% or higher on the final exam and achievement record.

**Who will score and analyze the data:** Departmental faculty

5. Demonstrate ability to properly identify and perform metal cutting process according to materials and location on vehicle.

**Assessment 1**

**Assessment Tool:** Student Achievement Record and Final Exam

**Assessment Date:** Spring/Summer 2015

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All

**Number students to be assessed:** All

**How the assessment will be scored:** Departmentally-developed rubric and answer key

**Standard of success to be used for this assessment:** 80% of the students will score 80% or higher on the final exam and achievement record.

**Who will score and analyze the data:** Departmental faculty

6. Identify and perform different methods of attaching structural components according to industry standards.

**Assessment 1**

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**Number students to be assessed:** All

**How the assessment will be scored:** Departmentally-developed rubric and answer key

**Standard of success to be used for this assessment:** 80% of the students will score 80% or higher on the final exam and achievement record.

**Who will score and analyze the data:** Departmental faculty

**Course Objectives**

1. Explore planned classroom activities and demonstrate the ability to apply fundamental principles of collision damage repair.

**Matched Outcomes**

2. Select repair techniques.

**Matched Outcomes**

3. Document vehicle damage according to standards.

**Matched Outcomes**

1. Determine outer panel replacement and perform repairs based on diagnosis of damage.
4. Determine panel replacement (quarter, box sides, door skins, rocker sections, core supports, etc.).

**Matched Outcomes**

1. Determine outer panel replacement and perform repairs based on diagnosis of damage.
5. Attach anchoring devices to vehicle.

**Matched Outcomes**

1. Determine outer panel replacement and perform repairs based on diagnosis of damage.
6. Remove or reposition anchoring components as necessary.

**Matched Outcomes**

1. Determine outer panel replacement and perform repairs based on diagnosis of damage.
7. Remove and reinstall all vehicle mechanical and electrical components that may interfere with or be damaged during repair.  
**Matched Outcomes**
  2. Properly evaluate electrical and mechanical components in repair procedure and perform repairs.
8. Determine the joint type for weld being made.  
**Matched Outcomes**
  9. Correctly perform weld selected (butt weld with backing, lap, etc.)  
**Matched Outcomes**
10. Reinstall or replace fixed glass using recommended materials.  
**Matched Outcomes**
11. Disassemble and remove damage structural components using repair techniques.  
**Matched Outcomes**
12. Correctly reassemble welded structural components.  
**Matched Outcomes**
13. Determine which materials are weldable and which are non-weldable materials.  
**Matched Outcomes**
14. Select replacement parts based on repair criteria.  
**Matched Outcomes**
15. Identify cutting process for different materials and locations.  
**Matched Outcomes**
16. Correctly perform cutting operations.  
**Matched Outcomes**
17. Identify different methods of attaching structural components (squeeze type resistance spot welding (STRSW), riveting, structural adhesive, silicon bronze, etc.)  
**Matched Outcomes**
18. Determine industry standards for each repair.  
**Matched Outcomes**
19. Appropriately attach structural components based on industry standards.  
**Matched Outcomes**

## **New Resources for Course**

### **Course Textbooks/Resources**

Textbooks  
Manuals  
Periodicals  
Software

### **Equipment/Facilities**

| <b><u>Reviewer</u></b>                                          | <b><u>Action</u></b>      | <b><u>Date</u></b>  |
|-----------------------------------------------------------------|---------------------------|---------------------|
| <b>Faculty Preparer:</b><br><i>Scott Malnar</i>                 | <i>Faculty Preparer</i>   | <i>Sep 09, 2013</i> |
| <b>Department Chair/Area Director:</b><br><i>Scott Malnar</i>   | <i>Recommend Approval</i> | <i>Sep 10, 2013</i> |
| <b>Dean:</b><br><i>Marilyn Donham</i>                           | <i>Recommend Approval</i> | <i>Sep 24, 2013</i> |
| <b>Vice President for Instruction:</b><br><i>Bill Abernethy</i> | <i>Approve</i>            | <i>Oct 11, 2013</i> |