## Washtenaw Community College Comprehensive Report

## CRT 203 Collision Technician I Effective Term: Spring/Summer 2022

#### **Course Cover**

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

**Department:** Transportation Technologies **Discipline:** Collision Repair Technician (new)

Course Number: 203 Org Number: 14100

Full Course Title: Collision Technician I Transcript Title: Collision Technician I

Is Consultation with other department(s) required: No

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

Reason for Submission: Inactivation

**Change Information:** 

Consultation with all departments affected by this course is required.

Rationale: No longer part of program. Proposed Start Semester: Winter 2022

Course Description: In this course, students will study advanced repair techniques such as damage analysis, the use of computerized frame equipment, panel sectioning and non-structural collision repair. Lab activities will include the selection of proper tools to repair or replace collision damaged parts on vehicles. Students learn to repair structurally damaged conventional frame and unitized bodies. Topics such as vehicle set-up procedures and the use of hydraulic frame straightening equipment, along with body and frame construction will be covered. Information concerning mechanical component replacement, as related to the collision repair industry, is also presented. This course contains material previously taught in CRT 201 and CRT 241.

#### **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**

ABR 123 minimum grade "B"

#### **Prerequisite**

ABR 124 minimum grade "B"

#### **Prerequisite**

ABR 113 minimum grade "B"

#### **Prerequisite**

ABR 135 minimum grade "B"

#### **General Education**

### **Request Course Transfer**

**Proposed For:** 

#### **Student Learning Outcomes**

1. Analyze and document vehicle damage and determine structural tolerances and 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 final exam and achievement record.

Who will score and analyze the data: Departmental faculty

2. Analyze vehicle to determine and apply anchoring and 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 final exam and achievement record.

Who will score and analyze the data: Departmental faculty

3. Recognize and apply appropriate repair techniques using power and hand tools.

#### 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% of higher on the exam and achievement record.

Who will score and analyze the data: Departmental faculty

4. Demonstrate proper techniques involved with sectioning steel body panels.

#### 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% of

higher on the exam and achievement record.

Who will score and analyze the data: Departmental faculty

5. Apply appropriate straightening techniques using frame equipment.

#### **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 properly evaluate mechanical, drivetrain and suspension components in repair procedure.

#### **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

#### **Course Objectives**

- 1. Explore planned classroom activities and demonstrate the ability to apply fundamental principles of collision damage repair.
- 2. Determine the extent of the direct and indirect damage and the direction of impact; document the methods and sequence of repair.
- 3. Identify heat limitations in structural components.
- 4. Repair damage using power tools and hand tools to restore proper contours and dimensions.
- 5. Remove and replace damaged sections of structural steel body panels.
- 6. Restore corrosion protection to repaired or replaced unibody structural areas.
- 7. Determine appropriate anchoring devices and points.
- 8. Select repair techniques.
- 9. Diagnose and measure structural damage to vehicles using a dedicated (fixture) measuring system.
- 10. Appropriately document vehicle damage.
- 11. Analyze misaligned or damaged steering, suspension, and powertrain components.
- 12. Analyze and document vehicle damage and direction of impact.
- 13. Identify heat limitations in structural components.

#### **New Resources for Course**

## **Course Textbooks/Resources**

Textbooks Manuals Periodicals Software

## **Equipment/Facilities**

Reviewer	<u>Action</u>	<u>Date</u>
Faculty Preparer:		
Justin Morningstar	Faculty Preparer	Nov 10, 2021
<b>Department Chair/Area Director:</b>		
Rocky Roberts	Recommend Approval	Nov 10, 2021
Dean:		
Jimmie Baber	Recommend Approval	Nov 12, 2021
<b>Curriculum Committee Chair:</b>		
Randy Van Wagnen	Reviewed	Dec 07, 2021
Assessment Committee Chair:		
Vice President for Instruction:		
Kimberly Hurns	Approve	Dec 08, 2021

## **Washtenaw Community College Comprehensive Report**

# CRT 203 Collision Technician I Effective Term: Winter 2014

#### **Course Cover**

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

**Department:** Automotive Body

**Discipline:** Collision Repair Technician

Course Number: 203 Org Number: 14110

Full Course Title: Collision Technician I Transcript Title: Collision Technician I

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

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 201 and CRT 241 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 study advanced repair techniques such as damage analysis, the use of computerized frame equipment, panel sectioning and non-structural collision repair. Lab activities will include the selection of proper tools to repair or replace collision damaged parts on vehicles. Students learn to repair structurally damaged conventional frame and unitized bodies. Topics such as vehicle set-up procedures and the use of hydraulic frame straightening equipment, along with body and frame construction will be covered. Information concerning mechanical component replacement, as related to the collision repair industry, is also presented. This course contains material previously taught in CRT 201 and CRT 241.

### **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 Math

#### **Requisites**

**Prerequisite** 

ABR 123 minimum grade "B"

and

**Prerequisite** 

ABR 124 minimum grade "B"

and

**Prerequisite** 

ABR 113 minimum grade "B"

or

**Prerequisite** 

ABR 135 minimum grade "B"

#### **General Education**

#### Request Course Transfer

**Proposed For:** 

#### **Student Learning Outcomes**

1. Analyze and document vehicle damage and determine structural tolerances and 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 final exam and achievement record. **Who will score and analyze the data:** Departmental faculty

2. Analyze vehicle to determine and apply anchoring and 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 final exam and achievement record. **Who will score and analyze the data:** Departmental faculty

3. Recognize and apply appropriate repair techniques using power and hand tools.

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% of higher on the exam and achievement record.

Who will score and analyze the data: Departmental faculty

4. Demonstrate proper techniques involved with sectioning steel body panels.

**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% of higher on the exam and achievement record. **Who will score and analyze the data:** Departmental faculty

5. Apply appropriate straightening techniques using frame equipment.

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 properly evaluate mechanical, drivetrain and suspension components in repair procedure.

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

## Course Objectives

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

#### **Matched Outcomes**

2. Determine the extent of the direct and indirect damage and the direction of impact; document the methods and sequence of repair.

#### **Matched Outcomes**

3. Identify heat limitations in structural components.

#### **Matched Outcomes**

4. Repair damage using power tools and hand tools to restore proper contours and dimensions.

**Matched Outcomes** 

5. Remove and replace damaged sections of structural steel body panels.

#### **Matched Outcomes**

6. Restore corrosion protection to repaired or replaced unibody structural areas.

#### **Matched Outcomes**

7. Determine appropriate anchoring devices and points.

#### **Matched Outcomes**

8. Select repair techniques.

#### **Matched Outcomes**

9. Diagnose and measure structural damage to vehicles using a dedicated (fixture) measuring system.

#### **Matched Outcomes**

10. Appropriately document vehicle damage.

#### **Matched Outcomes**

11. Analyze misaligned or damaged steering, suspension, and powertrain components.

#### **Matched Outcomes**

12. Analyze and document vehicle damage and direction of impact.

#### **Matched Outcomes**

13. Identify heat limitations in structural components.

**Matched Outcomes** 

## New Resources for Course Course Textbooks/Resources

Textbooks Manuals Periodicals Software

#### **Equipment/Facilities**

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