



Western Technical College

## 32404372 Internship - Automotive

### Course Outcome Summary

#### Course Information

<b>Description</b>	Student will be responsible to apply employment skills to obtain an internship in an automotive repair facility in the greater La Crosse area. The student can work in multiple areas of the business including parts, service reception and service repair department. This position must be approved by your program student advisor.
<b>Career Cluster</b>	Transportation, Distribution and Logistics
<b>Instructional Level</b>	Two-Year Technical Diploma
<b>Total Credits</b>	2
<b>Total Hours</b>	126

#### Pre/Corequisites

Prerequisite	10404195 Automotive Occupational and Business Operations
Prerequisite	32404353 Engine Repair
Prerequisite	32404358 Chassis Electrical and Electronic Systems

#### Textbooks

*Fundamentals of Automotive Technology*. 2nd Edition. Copyright 2018. CDX Automotive. Publisher: Jones & Bartlett Publishers. **ISBN-13:** 978-1-2842-0995-5. Required.

#### Success Abilities

1. Cultivate Passion: Enhance Personal Connections
2. Cultivate Passion: Expand a Growth-Mindset
3. Cultivate Passion: Increase Self-Awareness

4. Live Responsibly: Develop Resilience
5. Live Responsibly: Embrace Sustainability
6. Live Responsibly: Foster Accountability
7. Refine Professionalism: Act Ethically
8. Refine Professionalism: Improve Critical Thinking
9. Refine Professionalism: Participate Collaboratively
10. Refine Professionalism: Practice Effective Communication

## High Impact Practices

1. Work-Based Learning: this course applies your learning to your desired profession by working in industry placements such as internships, practicums, clinicals, or co-ops.

## Course Competencies

### 1. Demonstrate engine repair.

#### Assessment Strategies

- 1.1. On-the-job Performance

#### Criteria

*You will know you are successful when:*

- 1.1. you progress from guided supervision to independent performance
- 1.2. you diagnose an engine concern.
- 1.3. you remove and reinstall engine in an OBDII or newer vehicle.
- 1.4. you diagnose and repair cylinder and valve train.
- 1.5. you diagnose and repair engine block assembly.
- 1.6. you diagnose and repair lubrication and cooling systems.

#### Learning Objectives

- 1.a. Perform engine diagnosis.
- 1.b. Remove and reinstall engine in an OBDII or newer vehicle; reconnect all attaching components and restore the vehicle to running condition (as available)
- 1.c. Perform cylinder head and valve train diagnosis and repair.
- 1.d. Perform engine block assembly diagnosis and repair.
- 1.e. Perform lubrication and cooling systems diagnosis and repair.

### 2. Demonstrate automatic transmission and transaxle repair.

#### Assessment Strategies

- 2.1. On-the-job Performance

#### Criteria

*You will know you are successful when:*

- 2.1. you progress from guided supervision to independent performance
- 2.2. you diagnose general transmission and transaxle concerns.
- 2.3. you perform maintenance and repair on in-vehicle transmissions/ transaxles.
- 2.4. you repair off-vehicle transmissions/ transaxles.
- 2.5. you remove and reinstall transmission/ transaxle components of the drive-line.

#### Learning Objectives

- 2.a. Perform general transmission and transaxle diagnosis.
- 2.b. Perform in-vehicle transmission/transaxle maintenance and repair.
- 2.c. Perform off-vehicle transmission and transaxle repair.
- 2.d. Remove and reinstall transmission/transaxle and torque converter; inspect engine core plugs, rear crankshaft seal, dowel pins, dowel pin holes, and mating surfaces (as available).

### **3. Demonstrate manual drivetrain and axles repair.**

#### **Assessment Strategies**

3.1. On-the-job Performance

#### **Criteria**

*You will know you are successful when:*

- 3.1. you progress from guided supervision to independent performance
- 3.2. you diagnose drive train concerns.
- 3.3. you diagnose and repair clutch concerns.
- 3.4. you diagnose and repair transmission/ transaxle concerns.
- 3.5. you diagnose and repair drive-line components.
- 3.6. you diagnose and repair drive axle components.
- 3.7. you diagnose and repair four-wheel drive/ all-wheel drive components.

#### **Learning Objectives**

- 3.a. Perform general drive train diagnosis.
- 3.b. Perform clutch diagnosis and repair.
- 3.c. Perform transmission/transaxle diagnosis and repair.
- 3.d. Perform drive shaft and half shaft, universal and constant-velocity (cv) joint diagnosis and repair.
- 3.e. Perform drive axle diagnosis and repair.
- 3.f. Perform four-wheel drive/all-wheel drive component diagnosis and repair.

### **4. Demonstrate suspension and steering repair.**

#### **Assessment Strategies**

4.1. On-the-job Performance

#### **Criteria**

*You will know you are successful when:*

- 4.1. you progress from guided supervision to independent performance
- 4.2. you diagnose and repair steering systems.
- 4.3. you diagnose and repair suspension systems.
- 4.4. you service suspension and steering systems.
- 4.5. you diagnose, adjust and repair wheel alignment.
- 4.6. you diagnose and repair wheels and tires.

#### **Learning Objectives**

- 4.a. Perform steering systems diagnosis and repair.
- 4.b. Perform suspension systems diagnosis and repair.
- 4.c. Perform related suspension and steering service.
- 4.d. Perform wheel alignment diagnosis, adjustment, and repair.
- 4.e. Perform wheels and tires diagnosis and repair.

### **5. Demonstrate brake repair.**

#### **Assessment Strategies**

5.1. On-the-job Performance

#### **Criteria**

*You will know you are successful when:*

- 5.1. you progress from guided supervision to independent performance
- 5.2. you diagnose general brake systems.
- 5.3. you diagnose and repair hydraulic systems.
- 5.4. you diagnose and repair drum brakes.
- 5.5. you diagnose and repair disc brakes.
- 5.6. you diagnose and repair power-assist units.
- 5.7. you diagnose and repair wheel bearing, parking brakes and related electrical components.
- 5.8. you diagnose and repair electronic brake, traction and stability control systems.

#### **Learning Objectives**

- 5.a. Perform general brake systems diagnosis.

- 5.b. Perform hydraulic system diagnosis and repair.
- 5.c. Perform drum brake diagnosis and repair.
- 5.d. Perform disc brake diagnosis and repair.
- 5.e. Perform power-assist units diagnosis and repair.
- 5.f. Perform wheel bearing, parking brake, and electrical diagnosis and repair.
- 5.g. Perform electronic brake, traction and stability control systems diagnosis and repair.

## **6. Demonstrate electrical/ electronic systems repair.**

### **Assessment Strategies**

- 6.1. On-the-job Performance

### **Criteria**

*You will know you are successful when:*

- 6.1. you progress from guided supervision to independent performance
- 6.2. you diagnose general electrical systems.
- 6.3. you diagnose and service battery.
- 6.4. you diagnose and repair starting systems.
- 6.5. you diagnose and repair charging systems.
- 6.6. you diagnose and repair lighting systems.
- 6.7. you diagnose and repair gauge, warning devices, and driver information systems.
- 6.8. you diagnose and repair horn and wiper/ washer systems.
- 6.9. you diagnose and repair accessories.

### **Learning Objectives**

- 6.a. Perform general electrical system diagnosis.
- 6.b. Perform battery diagnosis and service.
- 6.c. Perform starting system diagnosis and repair.
- 6.d. Perform charging system diagnosis and repair.
- 6.e. Perform lighting systems diagnosis and repair.
- 6.f. Perform gauge, warning devices, and driver information system diagnosis and repair.
- 6.g. Perform horn and wiper/washer diagnosis and repair. Perform accessories diagnosis and repair.

## **7. Demonstrate heating and air conditioning repair.**

### **Assessment Strategies**

- 7.1. On-the-job Performance

### **Criteria**

*You will know you are successful when:*

- 7.1. you progress from guided supervision to independent performance
- 7.2. you diagnose and repair a/c systems.
- 7.3. you diagnose and repair refrigeration system components.
- 7.4. you diagnose and repair heating, ventilation, and engine cooling systems.
- 7.5. you diagnose and repair operating systems and related controls.
- 7.6. you recover, recycle and handle refrigerant.

### **Learning Objectives**

- 7.a. Perform general a/c system diagnosis and repair.
- 7.b. Perform refrigeration system component diagnosis and repair.
- 7.c. Perform heating, ventilation, and engine cooling systems diagnosis and repair.
- 7.d. Perform operating systems and related controls diagnosis and repair.
- 7.e. Perform refrigerant recovery, recycling, and handling.

## **8. Demonstrate engine performance repair.**

### **Assessment Strategies**

- 8.1. On-the-job Performance

### **Criteria**

*You will know you are successful when:*

- 8.1. you progress from guided supervision to independent performance

- 8.2. you diagnose general engine concerns.
- 8.3. you diagnose and repair computerized controls.
- 8.4. you diagnose and repair ignition systems.
- 8.5. you diagnose and repair fuel, air induction, and exhaust systems.
- 8.6. you diagnose and repair emissions control systems.

**Learning Objectives**

- 8.a. Perform general engine diagnosis.
- 8.b. Perform computerized controls diagnosis and repair.
- 8.c. Perform ignition system diagnosis and repair.
- 8.d. Perform fuel, air induction, and exhaust systems diagnosis and repair.
- 8.e. Perform emissions control system diagnosis and repair.

**9. Demonstrate duties of Automotive Service Consultant.**

**Assessment Strategies**

- 9.1. On-the-job Performance

**Criteria**

*You will know you are successful when:*

- 9.1. you progress from guided supervision to independent performance
- 9.2. you greet and interview customer to establish appropriate person/department to handle issue.
- 9.3. you relate information to technicians.
- 9.4. you relate diagnosis, repair and cost estimate information to the customer.
- 9.5. you determine applicable warranty information.
- 9.6. you coordinate customer appointments and follow up, handle conflict management with dissatisfied customers.
- 9.7. you perform other workplace operations as requested.
- 9.8. you relate the role of customer service rep to sales.

**Learning Objectives**

- 9.a. Meet and greet customer
- 9.b. Interview the customer
- 9.c. Identify appropriate person/department to handle customer issue
- 9.d. Interact with technicians for accurate information related to issue
- 9.e. Relate diagnosis, repair and cost information to the customer
- 9.f. Determine applicability of warranty service
- 9.g. Coordinate customer appointment scheduling, follow up
- 9.h. Examine role of customer service rep as it relates sales
- 9.i. Perform workplace operations as requested
- 9.j. Demonstrate entry level conflict management strategies with dissatisfied customers

**10. Demonstrate duties of Automotive Parts Specialist.**

**Assessment Strategies**

- 10.1. On-the-job Performance

**Criteria**

*You will know you are successful when:*

- 10.1. you progress from guided supervision to independent performance
- 10.2. you investigate part numbers, pricing and availability, and product warranty.
- 10.3. you maintain and utilize inventory systems.
- 10.4. you explain core exchange value and policy.
- 10.5. you communicate effectively with technicians, service reps and customers.
- 10.6. you demonstrate conflict management strategies as needed.
- 10.7. you pursue related part sales.

**Learning Objectives**

- 10.a. Investigate part numbers, prices, availability
- 10.b. Maintain inventory including ordering
- 10.c. Utilize inventory systems (tracking)
- 10.d. Provide product warranty information

- 10.e. Explain remanufactured exchange information
- 10.f. Explain core value and policy
- 10.g. Communicate with technicians, customer service rep, and customer
- 10.h. Demonstrate entry level conflict management strategies with dissatisfied customers
- 10.i. Pursue related part sales