



**Course Information**

<b>Course Title</b>	Automotive Automatic Transmission and Transaxle
<b>Course Prefix, Num. and Title</b>	AUMT 2425
<b>Division</b>	Vocational Science
<b>Department</b>	Automotive Technology
<b>Course Type</b>	WECM Course
<b>Course Catalog Description</b>	A study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions/transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. May be taught manufacturer specific.
<b>Pre-Requisites</b>	Credit for or concurrent enrollment in AUMT 1301.
<b>Co-Requisites</b>	AUMT 1310, AUMT 2413, and AUMT 2434

**Semester Credit Hours**

<b>Total Semester Credit Hours (SCH): Lecture Hours:</b>	4:3:4
<b>Lab/Other Hours</b>	
<b>Equated Pay Hours</b>	5
<b>Lab/Other Hours Breakdown: Lab Hours</b>	4
<b>Lab/Other Hours Breakdown: Clinical Hours</b>	Enter Clinical Hours Here.
<b>Lab/Other Hours Breakdown: Practicum Hours</b>	Enter Practicum Hours Here.
<b>Other Hours Breakdown</b>	List Total Lab/Other Hours Here.

**Approval Signatures**

<b>Title</b>	<b>Signature</b>	<b>Date</b>
<b>Prepared by:</b>		
<b>Department Head:</b>		
<b>Division Chair:</b>		
<b>Dean/VPI:</b>		
<b>Approved by CIR:</b>		

## Additional Course Information

**Topical Outline:** Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

Drivetrain Theory  
General Theories of Operation  
Electronic Controls  
Transmission Designs  
Torque Converters and Pumps  
Hydraulic Converters and Controls  
Gears and Shafts  
Reaction and Friction Units  
Common Automatic Transmissions

### Course Learning Outcomes:

**Learning Outcomes – Upon successful completion of this course, students will:**

1. Utilize appropriate safety procedures.
2. Diagnose service, adjust, and repair automatic transmissions/transaxles.

**Methods of Assessment:**

1. Quizzes and assignments Completion of priority 1, 2, and 3 items on the ASE task list, job sheets.
2. Quizzes and assignments Completion of priority 1, 2, and 3 items on the ASE task list, job sheets.

### Required text(s), optional text(s) and/or materials to be supplied by the student:

CDX Online e Textbook. & Fundamentals of Automotive Technology CDX Automotive Jones & Bartlett Learning textbook.  
Complete set of tools in compliance with the tool list.

### Suggested Course Maximum:

24

### List any specific or physical requirements beyond a typical classroom required to teach the course.

Complete auto shop lab with all the tools required by ASE to meet the standards for Automotive Manual Transmission/Transaxle Certification.

**Course Requirements/Grading System:** Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

90%to 100% = A  
80%to 89% = B  
70%to79% = C  
60%to 69% = D  
Below60% = F

The grade is based on the percentage basis between lecture and lab.

Quizzes and assignments will count 30% of the course grade. At the end of the course a final exam will be given that will count 10% of the course grade. The auto shop lab grade will count 60% of the course grade.

Lab work will be evaluated on attendance, percentage completion of priority 1, 2, and 3 items on the ASE task list, job sheets, having the required tools to perform lab work, cleanliness, and attitude.

### **Curriculum Checklist:**

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
  - Critical Thinking
  - Communication
  - Empirical & Quantitative Skills
  - Teamwork
  - Social Responsibility
  - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist