

AUTOMOTIVE DRIVE TRAIN TECHNICIAN - CAREER PATHWAY CERTIFICATE OF COMPLETION (CPCC)

Description

The Automotive Drivetrain Technician Career Pathway Certificate of Completion prepares students on all elements of manual and automatic transmissions as well as basic hydraulic and electrical principles. This certificate also prepares students to work with vehicle drivelines, transaxles, clutches, differentials, and transmissions.

The certificate prepares students for the [Automotive Service Excellence certification](#) in (A2) Automotive Automatic Transmission, (A3) Automotive Manual Drive Trains and Axles, and (G1) Maintenance and Light Repair.

Program Learning Outcomes

Upon successful completion of the program, students will be able to:

- Demonstrate appropriate basic technical knowledge and practical skills necessary for employment in Automotive Technology from previous basic skills courses.
- Apply Pascal's Law on the study of force and fluid dynamics.
- Diagnose and repair automatic transmission systems.
- Diagnose and repair manual transmission systems.
- Perform analysis techniques working with computer controls that apply to transmission systems.

ENTRANCE REQUIREMENTS

Academic Entrance Requirements

Required:

- Students must complete the following five courses before enrolling in other AUT courses: AUT 101 Basic Electricity for Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines, and AUT 115 College Success for Automotive Technology

Recommended:

- High school diploma or GED

ADDITIONAL PROGRAM COSTS (BEYOND STANDARD TUITION/FEES AND TEXTBOOKS)

Material Costs

- Automotive Service Excellence certification: up to \$450 total for all eight areas of testing
- Tools: \$1,500 to \$2,500
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): \$200

Enrollment Fees

- All AUT courses AUT 260 Diesel Performance II and higher: \$200 course fee

- All AUT courses lower than AUT 260 Diesel Performance II: \$15 course fee

Course Requirements

| Course | Title | Credits |
|----------------------|---|-----------|
| Core Courses | | |
| AUT 101 | Basic Electricity for Automotive | 2 |
| AUT 106 | Automotive Program Orientation | 1 |
| AUT 107 | Mechanical Systems I | 3 |
| AUT 110 | Small Gas Engines | 3 |
| AUT 115 | College Success for Automotive Technology | 2 |
| AUT 202 | Manual Drive Trains I | 3 |
| AUT 203 | Manual Drive Trains II | 3 |
| AUT 251 | Automatic Transmissions - Rebuild | 3 |
| AUT 256 | Automatic Transmissions Theory | 2 |
| Total Credits | | 22 |

Performance Standards

- Academic Requirements:
 - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
 - All courses in the program must be completed with a grade of C or higher.

Sample Plan

| First Year | | Credits |
|----------------------|---|----------------|
| Fall | | |
| AUT 101 | Basic Electricity for Automotive | 2 |
| AUT 106 | Automotive Program Orientation | 1 |
| AUT 107 | Mechanical Systems I | 3 |
| AUT 110 | Small Gas Engines | 3 |
| AUT 115 | College Success for Automotive Technology | 2 |
| Credits | | 11 |
| Winter | | |
| AUT 202 | Manual Drive Trains I | 3 |
| AUT 203 | Manual Drive Trains II | 3 |
| AUT 251 | Automatic Transmissions - Rebuild | 3 |
| AUT 256 | Automatic Transmissions Theory | 2 |
| Credits | | 11 |
| Total Credits | | 22 |