

AUTOMOTIVE MAINTENANCE TECHNICIAN

Overview

Automotive Technician Technical Diploma

Program Code: 31-602-3

For more information: wctc.edu/auto-main-tech (<http://www.wctc.edu/auto-main-tech/>)

Automotive maintenance technicians use high-tech and traditional equipment to complete service work, replace worn parts and conduct diagnostic tests on vehicles. In this program, gain skills to work on engines, drive trains, brakes, electrical, steering and suspension systems. Develop knowledge of hybrid vehicle safety, advanced chassis systems, and transmissions and transaxles. Training combines classroom and lab instruction.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C

Program GPA = 2.0

Build your degree along a career pathway. Start with a couple of courses or an entry-level credential to enter the job market in your area of interest, then continue with higher credentials on your educational path for job advancement and higher wages.

Career Pathway

1. Auto Maintenance and Light Repair Technical Diploma 21
2. Auto Maintenance Technician Technical Diploma 45
3. Automotive Technology-General Option 60

Learning Outcomes

Program Outcomes

1. Demonstrate professionalism appropriate for the auto service industry.
2. Perform maintenance and light repair of automotive brake systems.
3. Perform maintenance and light repair of automotive electrical & electronic systems.
4. Perform maintenance and light repair of automotive steering and suspension systems.

Additional Local Outcomes:

1. Perform diagnosis, service, and repair of automotive internal combustion engines
2. Perform diagnosis, service, and repair of automotive automatic transmission/transaxle systems
3. Perform diagnosis, service, and repair of automotive manual drive train and axles systems
4. Perform diagnosis, service, and repair of automotive heating and air conditioning systems

5. Perform diagnosis, service, and repair of automotive engine performance systems

Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.
- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
Core Courses		
442-131	Automotive Welding Fundamental	2
Approved Substitute: 442-303		
602-104	Brake Systems	3
Approved Substitute: 602-170		
602-107	Auto Service Fundamentals	2
Approved Substitute: 602-100		
602-108	Intro to Light Duty Diesel Eng	1
602-117	Engine Repair-Basic	2
Approved Substitute: 602-205		
602-118	Engine Repair-Advanced	3
Approved Substitute: 602-204		
602-122	Engine Performance Advanced	3
602-124	Steering & Suspension Systems	3
Approved Substitute: 602-130		
602-125	Electrical&Electronic Systems1	2
Approved Substitute: 602-110		
602-127	Electrical&Electronic Systems2	3
602-128	Electrical&Electronic Systems3	3
602-137	Intro-Hybrid & Elec Vehicles	3
Approved Substitute: 602-210		
602-155	Drive Train & Axle Systems	3
Approved Substitute: 602-149		
602-158	Automatic Transmis/Drive Train	3
Approved Substitute: 602-109		
602-190	Internship - Automotive	1
Approved Substitute: 602-187		
602-195	Advanced Chassis Systems	2
602-196	Climate Control Systems	3

602-197	Engine Performance 1	3
Total Credits		45

Full-time, Fall Start Plan

Exact order of courses is subject to change to accommodate lab time. Check with your Advisor on exact sequence.

First Year		
Fall Term 1		Credits
602-107	Auto Service Fundamentals	2
602-104	Brake Systems	3
602-124	Steering & Suspension Systems	3
602-125	Electrical&Electronic Systems1	2
Credits		10
Spring Term 1		
602-117	Engine Repair-Basic	2
602-127	Electrical&Electronic Systems2	3
602-196	Climate Control Systems	3
602-197	Engine Performance 1	3
Credits		11
Second Year		
Summer Term		
602-190	Internship - Automotive	1
Credits		1
Fall Term 1		
602-118	Engine Repair-Advanced	3
442-131	Automotive Welding Fundamental	2
602-108	Intro to Light Duty Diesel Eng	1
602-128	Electrical&Electronic Systems3	3
602-155	Drive Train & Axle Systems	3
Credits		12
Spring Term 1		
602-122	Engine Performance Advanced	3
602-137	Intro-Hybrid & Elec Vehicles	3
602-158	Automatic Transmis/Drive Train	3
602-195	Advanced Chassis Systems	2
Credits		11
Total Credits		45

Full-time, Spring Start Plan

Exact order of courses is subject to change to accommodate lab time. Check with your Advisor on exact sequence.

First Year		
Spring Term 1		Credits
602-104	Brake Systems	3
602-107	Auto Service Fundamentals	2
602-124	Steering & Suspension Systems	3
602-125	Electrical&Electronic Systems1	2
Credits		10
Fall Term 1		
602-117	Engine Repair-Basic	2
602-127	Electrical&Electronic Systems2	3

602-196	Climate Control Systems	3
602-197	Engine Performance 1	3
Credits		11
Second Year		
Spring Term 1		
442-131	Automotive Welding Fundamental	2
602-108	Intro to Light Duty Diesel Eng	1
602-118	Engine Repair-Advanced	3
602-128	Electrical&Electronic Systems3	3
602-155	Drive Train & Axle Systems	3
Credits		12
Summer Term		
602-190	Internship - Automotive	1
Credits		1
Fall Term 1		
602-122	Engine Performance Advanced	3
602-137	Intro-Hybrid & Elec Vehicles	3
602-158	Automatic Transmis/Drive Train	3
602-195	Advanced Chassis Systems	2
Credits		11
Total Credits		45

Recommended Course Sequence

Code	Title	Credits
Foundational Coursework:		
Take these first. Foundational courses start your pathway into this program.		
602-107	Auto Service Fundamentals	2
602-104	Brake Systems	3
602-124	Steering & Suspension Systems	3
602-125	Electrical&Electronic Systems1	2
602-117	Engine Repair-Basic	2
602-127	Electrical&Electronic Systems2	3
602-196	Climate Control Systems	3
602-197	Engine Performance 1	3
Intermediate Coursework:		
Take these next. Intermediate courses build on the foundational courses you have already taken.		
602-190	Internship - Automotive	1
602-118	Engine Repair-Advanced	3
442-131	Automotive Welding Fundamental	2
602-108	Intro to Light Duty Diesel Eng	1
602-128	Electrical&Electronic Systems3	3
602-155	Drive Train & Axle Systems	3
Advanced Coursework:		
These final courses finish up your program.		
602-122	Engine Performance Advanced	3
602-137	Intro-Hybrid & Elec Vehicles	3
602-158	Automatic Transmis/Drive Train	3
602-195	Advanced Chassis Systems	2
Total Credits		45