Automotive Maintenance Technician
31-404-3 Technical Diploma

Program Overview
The Automotive Maintenance Technician program will provide training in the eight content areas of the automobile as defined by Automotive Service Excellence (ASE). These areas are engine repair, automatic transmission and transaxles, manual drive train and axles, suspension and steering, brakes, electrical/electronic systems, heating and air conditioning, and engine performance. You will also take courses in DC electricity, communications, and mathematics.

Special Features
This program has received certification by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE). See their Web sites at www.natef.org and www.ase.com.

Student Profile
As an Automotive Maintenance Technician student, you should:

• Have good math and reading skills
• Have good reasoning and logical thinking skills
• Be able to work directly with customers
• Be able to work with industrial machinery, tools, equipment, and processes
• Enjoy working with both your mind and hands
• Be able to work alone or with people
• Be able to work with computers

Preparation for Admission
The following experiences will help you prepare for this program:

• Auto Service Work Experiences
• Communications
• General Metals
• Machine Shop
• Small Engines
• Welding
• Basic Computer Skills
• Basic Math

Program Outcomes
Employers will expect you, as an Automotive Maintenance Technician graduate, to be able to:

• Use tools and equipment to diagnose and service automobile systems.
• Practice safe techniques when servicing automobiles.
• Estimate automotive repair and order replacement parts.
• Communicate and respond to customers’ needs.

Career Outlook
After graduating from the program, you should be ready to start your career in an automobile dealership or a repair shop as an:

• Brake Technician
• Air Conditioning Technician
• Auto Transmission Technician
• Automotive Electrical Technician
• Service Writer
• Drive Train Technician
• Suspension and Alignment Technician
• Drivability Technician
• Automotive Technician

Curriculum

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>31404361</td>
<td>Suspension and Alignment ▲</td>
<td>3</td>
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<tr>
<td>31404362</td>
<td>Automotive Brake Systems ▲</td>
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<td>31404363</td>
<td>Automatic Transmissions ▲</td>
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<td>31404364</td>
<td>Air Conditioning and Heating Systems (WBL) ▲</td>
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<td>31404366</td>
<td>Automotive Fundamentals ▲</td>
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<td>31404371</td>
<td>Manual Drive Trains ▲</td>
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<td>Engine Repair 1 ▲</td>
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<td>Body Electrical Systems ▲</td>
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<tr>
<td>31414370</td>
<td>DC Automotive Electrical ▲</td>
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* This course requires a prerequisite and/or corequisite, and must be completed with a grade of “C-” or better.

Offered at:
Rice Lake
Superior
Programs and Course Descriptions

Course Descriptions

31404361  Suspension and Alignment - Credits: 3
This course introduces steering system types, suspension geometry, troubleshooting procedures, and repair of suspensions including both two- and four-wheel alignments. PREREQUISITE: 31404366 Automotive Fundamentals.

31404362  Automotive Brake Systems - Credits: 3
This course introduces students to automotive braking systems, troubleshooting procedures, and repair of brake systems to include manual, power, and anti-lock types. PREREQUISITE: 31404366 Automotive Fundamentals.

31404363  Automatic Transmissions - Credits: 4
This course includes the principles of construction and operation of automatic transmissions and transaxes. Diagnosis and repair of front-, rear-, and four-wheel drive transmissions will be covered. PREREQUISITE: 31404366 Automotive Fundamentals.

31404364  Air Conditioning and Heating Systems (WBL) - Credits: 3
This course introduces automotive air conditioning and heating systems. Theory of operation, diagnostic techniques, and servicing of heating and air conditioning systems will be covered. PREREQUISITES: 31404366 Automotive Fundamentals and 31414370 DC Automotive Electrical.

31404366  Automotive Fundamentals - Credits: 2
This course is an introduction to the automotive field. Career opportunities together with employer expectations will be discussed. Students will begin to use required safety practices for both general lab activities and when operating equipment. Vehicle maintenance inspections together with light repairs will take place.

31404370  DC Automotive Electrical - Credits: 2
This course will introduce students to Ohm’s law, electrical fundamentals, magnetism, and series and parallel circuits. Further studies will include automobile wiring diagrams, electrical test equipment, and basic troubleshooting. COREQUISITE: 32804373 Math 373 and 31404366 Automotive Fundamentals.

Graduate Employment Information
(WITC Graduate Survey Responses 2005-2006)

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<tr>
<td>Number of responses</td>
<td>25</td>
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<tr>
<td>Number available for employment</td>
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<tr>
<td>Number employed</td>
<td>19</td>
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<tr>
<td>Percent employed</td>
<td>90%</td>
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<tr>
<td>Employed in related field</td>
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<tr>
<td>% employed in WITC district</td>
<td>83%</td>
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<tr>
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<td>Average yearly salary</td>
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