About This Emphasis . . .

Students learn the fundamentals of electronics, starters, ignition, and charging systems; air conditioning, cooling and heating systems; safety; technical math; use of technical manuals; basic management skills; written and oral communication skills; and leadership. Advanced coursework includes an in-depth study of internal combustion engine disassembly, repair, reassembly, diagnosis and troubleshooting; suspension systems; and alignment and wheel balance.

POLICIES:
1. It is your responsibility to determine whether you have met the requirements for your degree. Please see the MSC Catalog for a complete list of graduation requirements.
2. You must turn in your “Intent to Graduate” form to the Registrar’s Office by September 15 if you plan to graduate the following May, and by February 15 if you plan to graduate the following December.
3. This program sheet must be submitted with your graduation planning sheet to your advisor during the semester prior to the semester of graduation, no later than October 1 for spring graduates, no later than March 1 for fall graduates.
4. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the WCCC Director of Instruction for signature.
5. Finally, the WCCC Director of Instruction or the department administrative assistant will take the signed forms to the Registrar’s Office. (Students cannot handle the forms once the advisor signs.)
6. If your petition for graduation is denied, it will be your responsibility to reapply for graduation in a subsequent semester. Your “Intent to Graduate” does not automatically move to a later graduation date.
7. NOTE: The semester before graduation, you may be required to take a Major Field Achievement Test (exit exam).

NAME: _______________ STUDENT ID # _______________

LOCAL ADDRESS AND PHONE NUMBER: ____________________________________________

__________________________ ( ) __________________________

I, (Signature) ____________________________________________, hereby certify that I have completed (or will complete) all the courses listed on the Program Sheet. I further certify that the grade listed for those courses is the final course grade received except for the courses in which I am currently enrolled and the courses which I complete next semester. I have indicated the semester in which I will complete these courses.

Signature of Advisor ____________________________ Date 20

Signature of WCCC Director of Instruction ____________________________ Date 20

Signature of Registrar ____________________________ Date 20

Associate of Applied Science: Transportation Services – Automotive Technology

2006-2007 Program Sheet, Page 1 of 4

Posted 5/11/06
• A cumulative grade point average of 2.0 or higher must be maintained for all courses taken and a “C” or better must be achieved in each course which comprises the area of emphasis or specialization for TSTA, TSTC, TSTD and TSTG.

• It is recommended that students work closely with a faculty advisor when selecting appropriate courses and scheduling classes.

**GENERAL EDUCATION** (18 Semester Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>No.</th>
<th>Credit</th>
<th>Grade</th>
<th>Term</th>
<th>Year</th>
<th>Trns/Subs</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (6 semester hours)</td>
<td>ENGL 111</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL 112</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Social and Behavioral Science, Humanities or Selected Speech Courses (6 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>No.</th>
<th>Credit</th>
<th>Grade</th>
<th>Term</th>
<th>Year</th>
<th>Trns/Subs</th>
</tr>
</thead>
</table>

Mathematics - MATH 113 or UTEC 107 (4 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>No.</th>
<th>Credit</th>
<th>Grade</th>
<th>Term</th>
<th>Year</th>
<th>Trns/Subs</th>
</tr>
</thead>
</table>

Kinesiology (2 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>No.</th>
<th>Credit</th>
<th>Grade</th>
<th>Term</th>
<th>Year</th>
<th>Trns/Subs</th>
</tr>
</thead>
</table>

See the M.S.C. catalog for the list of approved KINA/HPWE/Selected DANC courses.

**Associate of Applied Science: Transportation Services – Automotive Technology Course Requirements** (56 Semester Hours)

**Required Courses:** (26 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>No.</th>
<th>Credit</th>
<th>Grade</th>
<th>Term</th>
<th>Year</th>
<th>Trns/Subs</th>
</tr>
</thead>
</table>

Choose 30 semester hours from: TSTA 245, TSTA 247, TSTA 265, TSTA 267, TSTA 275, TSTA 287, TSTD 285, TSTG 115, TSTG 135, TSTG 140, TSTG 170, TSTG 175, TSTG 195, TSTG 240, TSTG 270

**GENERAL EDUCATION** (18 Semester Hours)

**English** – 6 Semester Hours

ENGL 111 and ENGL 112

**Mathematics** – 4 semester hours

UTEC 107 or MATH 113

**Social and Behavioral Science, Humanities, or Selected Speech Courses** – 6 semester hours (See current MSC catalog for the approved list of courses that fulfill this requirement.)

**Kinesiology** – 2 semester hours

KINE/HPWA 100 and one KINA/HPWE/Selected DANC course
## Associate of Applied Science in Transportation Services – Automotive Technology (56 Semester Hours)

**Required Courses:** (26 semester hours)
- TSTC 100 Introduction to Transportation Services
- TSTC 101 Vehicle Service and Inspection
- TSTC 110 Engine Fundamentals
- TSTC 130 Electrical Fundamentals
- TSTC 140 Drive Train Fundamentals
- TSTC 160 Electronic Control Systems
- TSTC 170 Chassis Fundamentals
- TSTC 171 Brake System Fundamentals
- TSTC 180 Fuel System Fundamentals
- TSTC 190 Climate Control Fundamentals
- UTEC 120 Industrial Safety Practices
- UTEC 150 Fluid Power
- UTEC 220 Industry Employment Practices
- WELD 151 Industrial Welding
- WELD 151L Industrial Welding Laboratory

**Choose 30 semester hours from:**
- TSTA 245 Manual Drive Trains
- TSTA 247 Automatic Drive Train Service
- TSTA 265 Engine Control Services
- TSTA 267 Body and Chassis Controls
- TSTA 275 Alignment and Suspension Service
- TSTA 287 Engine Performance and Emissions
- TSTD 285 Diesel Fuel Injection
- TSTG 115 Gas Engine Reconditioning
- TSTG 135 Electrical Component Repair
- TSTG 140 Job Shop
- TSTG 170 Practical Application
- TSTG 175 Hydraulic Brake Service
- TSTG 195 Climate Control Service
- TSTG 240 Advanced Job Shop
- TSTG 270 Advanced Practical Applications

- Additional expenses – Students entering the program may be required to purchase or have hand tools and appropriate clothing and safety gear with a total cost of approximately $1675.00. This does not include cost of required textbooks. These costs may vary with student need and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.
- Please see faculty advisor for approved electives.
SUGGESTED COURSE SEQUENCING FOR THE ASSOCIATE OF APPLIED SCIENCE WITH A MAJOR IN TRANSPORTATION SERVICES, EMPHASIS IN AUTOMOTIVE TECHNOLOGY

This is a recommended sequence of course work. Certain courses may have prerequisites or are only offered during the Fall or Spring semesters. It is the student’s responsibility to meet with their advisor and check the 2 year course matrix on the Mesa State website for course availability.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
<th>Spring Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSTC 100   Introduction to Transportation Services</td>
<td>1</td>
<td>TSTC 140 Drive Train Fundamentals</td>
<td>1</td>
</tr>
<tr>
<td>TSTC 101   Vehicle Service and Inspection</td>
<td>2</td>
<td>TSTC 171 Brake System Fundamentals</td>
<td>2</td>
</tr>
<tr>
<td>TSTC 110   Engine Fundamentals</td>
<td>1</td>
<td>TSTC 190 Climate Control Fundamentals</td>
<td>1</td>
</tr>
<tr>
<td>TSTC 130   Electrical Fundamentals</td>
<td>2</td>
<td>UTEC 150 Fluid Power</td>
<td>3</td>
</tr>
<tr>
<td>TSTC 160   Electronic Control Systems</td>
<td>2</td>
<td>TSTG/A Electives</td>
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</tr>
<tr>
<td>TSTC 170   Chassis Fundamentals</td>
<td>1</td>
<td>KINE/HPWA 100 Health and Wellness</td>
<td>1</td>
</tr>
<tr>
<td>TSTC 180   Fuel System Fundamentals</td>
<td>1</td>
<td>KINA/HPWE Activity</td>
<td>1</td>
</tr>
<tr>
<td>UTEC 120   Industrial Safety Practices</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTEC 107   Math for Technology or MATH 113</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 111   English Composition</td>
<td>3</td>
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</tbody>
</table>

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
<th>Spring Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 151   Industrial Welding</td>
<td>1</td>
<td>UTEC 220 Industry Employment Practices</td>
<td>3</td>
</tr>
<tr>
<td>WELD 151L  Industrial Welding Laboratory</td>
<td>2</td>
<td>TSTG/A Electives</td>
<td>9</td>
</tr>
<tr>
<td>General Education Soc/Beh Sci., Humanities, Speech</td>
<td>3</td>
<td>TSTG Electives</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 112   English Composition</td>
<td>3</td>
<td>General Education Soc/Beh Sci., Humanities, Speech</td>
<td>3</td>
</tr>
<tr>
<td>TSTA/G     Electives</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18