



2006 – 07 PETITION/PROGRAM SHEET

Degree: Technical Certificate
Major: Transportation Services
Emphasis: Automotive Service

www.mesastate.edu/wccc/trans.htm

About This Certificate . . .

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.

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\_\_\_\_

- 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.

**Technical Certificate: Transportation Services – Automotive Service (40 Semester Hours)**

Course	No.	Credit	Grade	Term	Year	Trns/Subs	Course	No.	Credit	Grade	Term	Year	Trns/Subs
TSTC	100	1					TSTC	171	2				
TSTC	101	2					TSTC	180	1				
TSTC	110	1					TSTC	190	1				
TSTC	130	2					UTEC	107	4				
TSTC	140	1					UTEC	120	3				
TSTC	160	2					UTEC	150	3				
TSTC	170	1					WELD	151	1				
							WELD	151L	2				

Restricted Electives, Choose 13 semester hours from: TSTA 245, TSTA 247, TSTA 265, TSTA 267, TSTA 275, TSTA 287, TSTG 115, TSTG 135, TSTG 140, TSTG170, TSTG 175, TSTG 195, TSTG 240, TSTG 270, UTEC 220.  
(Please see advisor when selecting electives.)

_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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**Technical Certificate: Transportation Services – Automotive Service Course Requirements (40 Semester Hours)**

**Required Courses:**

- 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 107 Mathematics for Technology
- UTEC 120 Industry Safety Practices
- UTEC 150 Fluid Power
- WELD 151 Industrial Welding
- WELD 151L Industrial Welding Laboratory

**Choose 13 semester hours from:**

- |   |  |
|---|--|
| TSTA 245 Manual Drive Trains              | TSTG 140 Job Shop                        |
| TSTA 247 Automatic Drive Train Service    | TSTG 170 Practical Application           |
| TSTA 265 Engine Control Services          | TSTG 175 Hydraulic Brake Service         |
| TSTA 267 Body and Chassis Controls        | TSTG 195 Climate Control Services        |
| TSTA 275 Alignment and Suspension Service | TSTG 240 Advanced Job Shop               |
| TSTA 287 Engine Performance and Emissions | TSTG 270 Advanced Practical Applications |
| TSTG 115 Gas Engine Reconditioning        | UTEC 220 Industry Employment Practices   |
| TSTG 135 Electrical Component Repair      |  |

- 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 TECHNICAL CERTIFICATE  
WITH A MAJOR IN TRANSPORTATION SERVICES,  
EMPHASIS IN AUTOMOTIVE SERVICE**

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.

<u>First Semester</u>			<u>Second Semester</u>		
		<u>Hours</u>			<u>Hours</u>
TSTC 100	Introduction to Transportation Services	1	TSTC 140	Drive Train Fundamentals	1
TSTC 101	Vehicle Service and Inspection	2	TSTC 171	Brake System Fundamentals	2
TSTC 110	Engine Fundamentals	1	TSTC 190	Climate Control Fundamentals	1
TSTC 130	Electrical Fundamentals	2	UTEC 150	Fluid Power	3
TSTC 160	Electronic Control Systems	2	TSTG	Electives	3
TSTC 170	Chassis Fundamentals	1	TSTG/A	Electives	<u>10</u>
TSTC 180	Fuel System Fundamentals	1			20
UTEC 107	Math for Technology	4			
UTEC 120	Industry Safety Practices	3			
WELD 151	Industrial Welding	1			
WELD 151L	Industrial Welding Lab	<u>2</u>			
		20			