



2006 – 07 PETITION/PROGRAM SHEET
Degree: Technical Certificate
Major: Transportation Services
Emphasis: Diesel Mechanics
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. Advanced coursework includes an in-depth study of internal combustion engine disassembly, repair, reassembly, diagnosis and troubleshooting; suspension systems; and alignment and wheel balance. The diesel technology degree concentrates on on-road trucks and light duty diesel-powered vehicles.

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 – Diesel Mechanics (40 Semester Hours)

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

Restricted Electives, Choose 13 semester hours from: Choose 13 semester hours from TSTA 245, TSTA 265, TSTA 287, TSTD 177, TSTD 215, TSTD 265, TSTD 275, TSTD 285, TSTG 135, TSTG 140, TSTG 170, TSTG 175, TSTG 195, TSTG 240, TSTG 270, UTEC 220 (Please see advisor when selecting electives.)

_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Technical Certificate: Transportation Services – Diesel Mechanics 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 Electrical Control Fundamentals
- TSTC 170 Chassis Fundamentals
- TSTC 171 Brake System Fundamentals
- TSTC 180 Fuel System Fundamentals
- TSTC 190 Climate Control Fundamentals
- Utec 107 Math 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 the following:

- TSTA 245 Manual Drive Trains
- TSTA 265 Engine Control Services
- TSTA 287 Engine Performance and Emissions
- TSTD 177 Air Systems Repair and Service
- TSTD 215 Diesel Engine Reconditioning
- TSTD 265 Diesel Engine Controls
- TSTD 275 Heavy Duty Suspension
- TSTD 285 Diesel Fuel Injection

- 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
- Utec 220 Industry Employment Practices

- 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 \$1,675.00. 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 DIESEL MECHANICS**

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 Fundamentals	2	TSTG/D	Electives	<u>13</u>
TSTC 170	Chassis Fundamentals	1			20
TSTC 180	Fuel System Fundamentals	1			
UTEC 120	Industry Safety Practices	3			
WELD 151	Industrial Welding	1			
WELD 151L	Industrial Welding Lab	2			
UTEC 107	Math for Technology	<u>4</u>			
		20			