

# 2007 - 08 PETITION/PROGRAM SHEET **Degree:** Associate of Applied Science – Transportation Services **Emphasis: Diesel Technology** www.mesastate.edu/wccc/trans.htm

## 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. The diesel technology emphasis 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.
- 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 2. by February 15 if you plan to graduate the following December.
- This program sheet must be submitted with your graduation planning sheet to your advisor during the semester prior to the semester of 3. graduation, no later than October 1 for spring graduates, no later than March 1 for fall graduates.
- Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the WCCC Director of Instruction for signature. 4
- Finally, the WCCC Director of Instruction or the department administrative assistant will take the signed forms to the Registrar's Office. 5. (Students cannot handle the forms once the advisor signs.)
- If your petition for graduation is denied, it will be your responsibility to reapply for graduation in a subsequent semester. Your "Intent to 6. Graduate" does not automatically move to a later graduation date.
- NOTE: The semester before graduation, you may be required to take a Major Field Achievement Test (exit exam). 7.

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.

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Signature of Advisor	Date	
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Signature of WCCC Director of Instruction	Date	
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Signature of Registrar	Date	

#### Students should work closely with a faculty advisor when selecting and scheduling courses prior to registration.

Degree Requirements:

- 2.00 cumulative GPA or higher in all MSC coursework 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.
- Program sheets are for advising purposes only. Because a program may have requirements specific to the degree, check with your advisor for additional guidelines, including prerequisites, grade point averages, grades, exit examinations, and other expectations. It is the student's responsibility to be aware of, and follow, all guidelines for the degree being pursued. Any exceptions or substitutions must be approved by the faculty advisor and/or Department Head.
- When filling out the program sheet a course can be used only once.
- See the "Undergraduate Graduation Requirements" in the Mesa State College catalog for additional graduation information.

**GENERAL EDUCATION REQUIREMENTS** (18 Semester Hours) See the current Mesa State College catalog for a list of courses that fulfill the requirements below. If a course is on the general education list of options and a requirement for your major, <u>you must use it to fulfill</u> the major requirement and make a different selection within the general education requirement.

Course No Title	Sem.hrs	Grade	Term/Trns
<b>English</b> (6 semester hours)			
ENGL 111 English Composition	3		
ENGL 112 English Composition	3		
Math: MATH 113 or UTEC 107 (4 semes	ster hours)		
	4		
Social and Behavioral Science, Humanitie Courses (6 semester hours)	es or Seleo	cted Spo	eech
	3		
	_ 3		
<b>Kinesiology</b> (2 semester hours)			
KINE 100 Health and Wellness	1		
KINA 1	_ 1		

Course No Title

Sem.hrs Grade Term/Trns

#### ASSOCIATE OF APPLIED SCIENCE: TRANSPORTATION SERVICES – DIESEL TECHNOLOGY COURSE REQUIREMENTS

(55 semester hours)

Required Courses: (26 semester hous)						
<b>TSTC 100</b>	Intro to Transportation Services	1				
TSTC 101	Vehicle Service and Inspection	2				
TSTC 110	Engine Fundamentals	1				
TSTC 130	Electrical Fundamentals	2				
<b>TSTC 140</b>	Drive Train Fundamentals	1				
TSTC 160	Electronic Control Systems	2				
TSTC 170	Chassis Fundamentals	1				
TSTC 171	Brake System Fundamentals	2				
TSTC 180	Fuel System Fundamentals	1				
TSTC 190	Climate Control Fundamentals	1				
<b>UTEC 120</b>	Industrial Safety Practices	3				
<b>UTEC 150</b>	Fluid Power	3				
<b>UTEC 220</b>	Industry Employment Practices	3				
WELD 151	Industrial Welding	2				

<u>Choose 30 credit hours from:</u> TSTA 245, TSTA 287, TSTD 177, TSTD 215, TSTD 265, TSTD 275, TSTD 285, TSTG 115, TSTG 135, TSTG 140, TSTG 170, TSTG 175, TSTG 195, TSTG 240, TSTG 270


#### Choose 30 semester hours from:

TSTA 245 Manual Drive Trains TSTA 287 Engine Performance and Emissions TSTD 177Air 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 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 \$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.

# SUGGESTED COURSE SEQUENCING FOR THE ASSOCIATE OF APPLIED SCIENCE WITH AN EMPHASIS IN TRANSPORTATION SERVICES – DIESEL 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

Fall Semester	H	ours	Spring Semester		<b>Hours</b>
<b>TSTC 100</b>	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	<b>TSTC 190</b>	Climate Control Fundamentals	1
<b>TSTC 130</b>	Electrical Fundamentals	2	<b>UTEC 150</b>	Fluid Power	3
TSTC 160	Electronic Control Systems	2	TSTG/D	Electives	9
TSTC 170	Chassis Fundamentals	1	<b>KINE 100</b>	Health and Wellness	1
TSTC 180	Fuel System Fundamentals	1	KINA	Activity	1
<b>UTEC 120</b>	Industrial Safety Practices	3		-	18
<b>UTEC 107</b>	Math for Technology or				
MATH 113	College Algebra	4			
ENGL 111	English Composition	3			
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# SOPHOMORE YEAR

Fall Semester		<b>Hours</b>	Spring Semes	ter	<b>Hours</b>
WELD 151	Industrial Welding	2	<b>UTEC 220</b>	Industry Employment Practices	3
General Educat	ion Soc/Beh Sci., Humanities, Speech	3	TSTG/D	Electives	12
ENGL 112	English Composition	3	General Educa	tion Soc/Beh Sci., Humanities, Speech	3
TSTG/D	Electives	9			18
		17			