

### 2006 - 07 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.
- 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	R:	
	( )	
on the Program Sheet. I further certify that the	, hereby certify that I have completed (or will grade listed for those courses is the final course grade received exceptlete next semester. I have indicated the semester in which I will comp	pt for the courses in which I am
Signature of Advisor		
5151141415 51 114 115 51	Date	20
Signature of WCCC Director of Instruction	Date  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.

GENERAL EDUCATION (18 Semester Hours)													
GENER Course	No.	Credit	(18 Sen Grade	nester H Term	ours) Year	Trns/Subs	Course	No.	Credi	t Grade	Term	Year	Trns/Subs
		ter hours)	Grade	101111	<u>1 cur</u>	11115/15405	Social and Behavi						
ENGL	111	_3_					Courses (6 semest		,				
ENGL	112	3							3				
									3				
Mathem	natics - M		or UTE	EC 107 (	4 semest	er hours)	Kinesiology (2 ser						
		4					KINE/HPWA	100	<u>_1</u> 1				
							KINA/HPWE See the M.S.C. catal			wed VINA	/HDW/E/C	alastad D/	NC aguragas
			TD.			· D: 1						elected DF	anc courses.
Associat	te of App	olied Scier	ice: Trai	nsportat	ion Ser	vices – Diesel	Technology Course R	equireme	nts (56 Se	mester H	ours)		
Require	d Course	es: (26 sen	nester ho	ours)									
Course	No.	Credit	Grade	e <u>Ter</u>	<u>m</u> <u>Y</u>	ear Trns/Su	ubs <u>Course</u>	No.	Credit	<u>Grade</u>	<u>Term</u>	Year	Trns/Subs
TSTC	100	_1_		- —			_ TSTC	<u>171</u>					
TSTC	101	2				<del></del>	_ TSTC	180	1				
TSTC	110	_1_				<del></del>	_ TSTC	190	_1_				
TSTC	130	2		- —			_ UTEC	120	3				
TSTC	140	_1_				<del></del>	_ UTEC	150	3				
TSTC	160	2					_ UTEC	220	3				
TSTC	170	_1_				<del></del>	_ WELD	151	_1_				
							WELD	<u>151L</u>	3				
Choose 3	30 credit	hours from	n: TSTA	A 245, T	STA 287	7, TSTD 177,	TSTD 215, TSTD 265,	TSTD 27	5, TSTD	285, TST	G 115, T	STG 135.	TSTG 140,
		3 175, TST					,		,	,	,		,
Course	<u>No.</u>	Credit	Grade	e <u>Ter</u>	m Y	ear Trns/Su	<u>ubs</u> <u>Course</u>	No.	Credit	<u>Grade</u>	<u>Term</u>	Year	Trns/Subs
			-			<u> </u>							
						<del></del>							
GENER	AL EDU	JCATION	l (18 Sen	nester H	ours)								
	6.0												
English – 6 Semester Hours ENGL 111 and ENGL 112													
ENOD III wild ENOD III													
Mather	natics –	4 semest	er hours	S									
	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 – Diesel 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 TSTG 135 Electrical Component Repair TSTA 287 Engine Performance and Emissions TSTG 140 Job Shop TSTD 177Air Systems Repair and Service TSTG 170 Practical Application TSTD 215 Diesel Engine Reconditioning TSTG 175 Hydraulic Brake Service TSTD 265 Diesel Engine Controls TSTG 195 Climate Control Service TSTD 275 Heavy Duty Suspension TSTG 240 Advanced Job Shop TSTD 285 Diesel Fuel Injection TSTG 270 Advanced Practical

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.

TSTG 115 Gas Engine Reconditioning

**Applications** 

# 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	Но	ours	Spring Semester		Hours
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/D	Electives	9
TSTC 170	Chassis Fundamentals	1	KINE/HPWA 100	Health and Wellness	1
TSTC 180	Fuel System Fundamentals	1	KINA/HPWE	Activity	<u>1</u>
UTEC 120	Industrial Safety Practices	3			18
UTEC 107	Math for Technology or				
MATH 113	College Algebra	4			
ENGL 111	English Composition	<u>3</u>			
	-	20			

## SOPHOMORE YEAR

Fall Semester		Hours	Spring Semest	ter	Hours
WELD 151	Industrial Welding	1	UTEC 220	Industry Employment Practices	3
WELD 151L	Industrial Welding Laboratory	2	TSTG/D	Electives	12
General Educati	on Soc/Beh Sci., Humanities, Speech	3	General Educa	tion Soc/Beh Sci., Humanities, Speech	<u>3</u>
ENGL 112	English Composition	3		_	18
TSTG/D	Electives	9			
		18			