



**2013-2014 PETITION/PROGRAM SHEET**  
**Award: Technical Certificate**  
**Program of Study: Transportation Services**  
**Specialization: Diesel Mechanics**

**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 mechanics specialization concentrates on on-road trucks and light duty diesel-powered vehicles. Career options include automotive/diesel technician, parts and service distributor, industrial sales representative, and service manager.

For more information on what you can do with this major, go to <http://www.coloradomesa.edu/wccc/programs.html>

**POLICIES:**

1. It is your responsibility to determine whether you have met the requirements for your degree. Please see the 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 Department Head for signature.
5. Finally, the Department Head 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).

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**NAME:** \_\_\_\_\_ **STUDENT ID #** \_\_\_\_\_

**LOCAL ADDRESS AND PHONE NUMBER:** \_\_\_\_\_  
 \_\_\_\_\_ ( ) \_\_\_\_\_

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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 Department Head Date \_\_\_\_\_ 20\_\_\_\_

\_\_\_\_\_  
 Signature of Registrar Date \_\_\_\_\_ 20\_\_\_\_

**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 CMU coursework
- “C” or better in each course which comprises the area of emphasis or specialization.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- A student must follow the CMU graduation requirements either from 1) the program sheet for the major in effect at the time the student officially declares a major; or 2) a program sheet for the major approved for a year subsequent to the year during which the student officially declares the major and is approved for the student by the department head. Because a program may have requirements specific to the degree, the student should check with the faculty advisor for additional criteria. It is the student’s responsibility to be aware of, and follow, all requirements for the degree being pursued. Any exceptions or substitutions must be approved by the student’s faculty advisor and Department Head.
- 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 \$2,500.00 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.
- See the “Undergraduate Graduation Requirements” in the catalog for additional graduation information

**Technical Certificate: Transportation Services – Diesel Mechanics**

(36 Semester Hours) See the current 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, you must use it to fulfill the major requirement and make a different selection within the general education requirement.

Course No	Title	Sem.hrs	Grade	Term/Trns
TSTC 100	Intro to Transportation Services	1	_____	_____
TSTC 101	Vehicle Service & Inspection	2	_____	_____
TSTC 110	Engine Fundamentals	1	_____	_____
TSTC 130	Electrical Fundamentals	2	_____	_____
TSTC 140	Drive Train Fundamentals	1	_____	_____
TSTC 160	Electrical Control Fundamentals	2	_____	_____
TSTC 170	Chassis Fundamentals	1	_____	_____
TSTC 171	Brake System Fundamentals	2	_____	_____
TSTC 180	Fuel System Fundamentals	1	_____	_____

Course No	Title	Sem.hrs	Grade	Term/Trns
TSTC 190	Climate Control Fundamentals	1	_____	_____
MATH 107	Career Mathematics	3	_____	_____
TSTG 120	Industry Safety Practices	3	_____	_____
TSTG 150	Fluid Power	3	_____	_____

Restricted Electives, Choose 13 semester hours from list below. (Please see advisor when selecting electives).

**Choose 12 semester hours from:**

- TSTA 245 Manual Drive Trains (4)
- TSTA 265 Engine Control Services (2)
- TSTA 267 Body and Chassis Controls (2)
- TSTA 287 Engine Performance and Emissions (2)
- TSTG 135 Electrical Component Repair (2)
- TSTA 289 Alternative Fueled Vehicles (2)
- TSTG 140 Job Shop (4)
- TSTD 177 Air Systems Repair and Service (2)
- TSTG 170 Practical Application (4)
- WELD 151 Introduction to Welding (3)

- TSTD 215 Diesel Engine Reconditioning (5)
- TSTG 175 Hydraulic Brake Service (2)
- TSTD 265 Diesel Engine Controls (3)
- TSTG 195 Climate Control Service (2)
- TSTD 275 Heavy Duty Suspension (2)
- TSTG 240 Advanced Job Shop (4)
- TSTD 285 Diesel Fuel Injection (2)
- TSTG 270 Advanced Practical Applications (4)
- TSTG 220 Industry Employment Practices (3)

**SUGGESTED COURSE SEQUENCING FOR THE TECHNICAL CERTIFICATE  
WITH A PROGRAM OF STUDY IN TRANSPORTATION SERVICES,  
SPECIALIZATION 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 the assigned advisor and check the 2 year course matrix on the Colorado Mesa website for course availability.

<b>First Semester</b>		<b>Hours</b>	<b>Second Semester</b>		<b>Hours</b>
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	TSTC 180	Fuel System Fundamentals	1
TSTC 160	Electronic Control Fundamentals	2	TSTG 150	Fluid Power	3
TSTC 170	Chassis Fundamentals	1	TSTAG/D	Electives	<u>10</u>
TSTG 120	Industry Safety Practices	3			18
Electives		3			
MATH 107	Career Mathematics	<u>3</u>			
		18			