2015-2016 PETITION/PROGRAM SHEET
Degree: Associate of Applied Science
Major: Transportation Services
Emphasis: Diesel Technology

About This Emphasis . . .

In the Associate of Applied Science degree with a major in Transportation Services and emphasis in Diesel Technology, 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. Students will be prepared for careers as diesel technicians, parts and service distributors, industrial sales representatives, service managers, and business owners in the transportation services industry.

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

All CMU associate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Apply principles of grammar and vocabulary in the documentation required to perform the duties of a repair technician to properly repair vehicles. (Communication Fluency)
2. Apply Mathematical concepts and practices that are required to properly perform vehicle repair competencies to an (ASE) Automotive Service Excellence standard. (Quantitative Fluency)
3. Evaluate evidence discovered during the diagnosis and troubleshooting of vehicles and apply those finding to strategies to properly repair the vehicle. (Critical Thinking)
4. Describe the scope and application of principle features of the field of study, including core practices in the vehicle repair industry. (Specialized Knowledge)
5. Demonstrate mastery of the current terminology in the Transportation Service industry and generate substantially error-free products or processes that define the duties of a repair technician.(Specialized Knowledge)
6. Perform vehicle repair practices that meet or exceed industry standards as defined by (ASE) Automotive Service Excellence. (Applied Learning)
7. Demonstrate personal and professional ethical behavior as applied to the industry. (Applied Learning)
8. Define the legal and ethical standards required of the vehicle repair industry. (Specialized Knowledge)

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 have read and understand the policies listed on the last page of this 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.

_____ _____20_____
Signature of Advisor Date

_____ _____20_____
Signature of Department Head Date

_____ _____20_____
Signature of Registrar Date

DEGREE REQUIREMENTS:

- 69 semester hours total (A minimum of 16 taken at CMU in no fewer than two semesters).
- 2.00 cumulative GPA or higher in all CMU coursework and a "C" or better must be achieved in coursework toward major content area.
- 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.
- When filling out the program sheet a course can be used only once.
- See the "Undergraduate Graduation Requirements" in the catalog for additional graduation information.

ESSENTIAL LEARNING REQUIREMENTS (Minimum 15 semester hours) See the current catalog for a list of courses that fulfill the requirements below. If a course is on the Essential Learning 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 Essential Learning requirement. The Essential Learning capstone course and co-requisite Essential Speech course (required for bachelor's degrees) cannot be used as options for the below requirements.

Course No	Title	Sem.hrs	Grade	Term/Trns
Communication (6 semester hours)				
ENGL 111	English Composition	3		
ENGL 112	English Composition	3		
-OR-				
ENGL 111	English Composition **and**	3		
SPCH 101	Interpersonal Communication **or**	3		
SPCH 102	Speechmaking	3		
Mathematics: MATH 107 Career Mathematics or higher (Minimum 3 semester hours)				
		3		
Social Science, Natural Science, Fine Arts or Humanities, Fine Arts, or Humanities (Minimum 6 semester hours)				
		3		
		3		

*Please see your advisor for requirements specific to this program.

Course No	Title	Sem.hrs	Grade	Term/Trns
WELLNESS REQUIREMENT (2 semester hours)				
KINE 100	Health and Wellness	1		
KINA 1		1		

ASSOCIATE OF APPLIED SCIENCE: TRANSPORTATION SERVICES – DIESEL TECHNOLOGY COURSE REQUIREMENTS
(52 semester hours)

Required Courses: (23semester hours)				
TSTC 100	Intro to Transportation Services	1		
TSTC 101	Vehicle Service and Inspection	2		
TSTC 110	Engine Fundamentals	1		
TSTC 130	Electrical Fundamentals	2		
TSTC 140	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		
TSTG 120	Industrial Safety Practices	3		
TSTG 150	Fluid Power	3		
TSTG220	Industry Employment Practices	3		

Choose 29 credit hours from list below.

Choose 29 semester hours from:

TSTA 245 Manual Drive Trains (4)
TSTA 275 Alignment and Suspension Service (3)
TSTA 267 Body and Chassis Conrols (2)
TSTA 287 Engine Performance and Emissions 2)
TSTA 289 Alternative Fueled Vehicles (2)
TSTD 177Air Systems Repair and Service (2)
TSTD 215 Diesel Engine Reconditioning (5)
TSTD 265 Diesel Engine Controls (3)
TSTD 275 Heavy Duty Suspension (2)
WELD 151 Introduction to Welding (3)
TSTD 285 Diesel Fuel Injection (2)
TSTG 115 Gas Engine Reconditioning (4)
TSTG 135 Electrical Component Repair (2)
TSTG 140 Job Shop (4)
TSTG 170 Practical Application (4)
TSTG 175 Hydraulic Brake Service (2)
TSTG 195 Climate Control Service (2)
TSTG 240 Advanced Job Shop (4)
TSTG270AdvancedPracticalApplications(4)

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 $2500.00. 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 the assigned advisor and check the 2 year course matrix on the Colorado Mesa website for course availability.

FRESHMAN YEAR

Fall Semester		Hours
TSTC 100	Introduction to Transportation Services	1
TSTC 101	Vehicle Service and Inspection	2
TSTC 110	Engine Fundamentals	1
TSTC 130	Electrical Fundamentals	2
TSTC 160	Electronic Control Systems	2
TSTC 170	Chassis Fundamentals	1
TSTG 120	Industrial Safety Practices	3
MATH 107	Career Mathematics or higher	3
Electives	TSTA/G/D	3
		18

Spring Semester		Hours
TSTC 140	Drive Train Fundamentals	1
TSTC 171	Brake System Fundamentals	2
TSTC 180	Fuel System Fundamentals	1
TSTC 190	Climate Control Fundamentals	1
TSTG 150	Fluid Power	3
TSTA/G/D	Electives	6
ENGL 111	English Composition	3
		17

SOPHOMORE YEAR

Fall Semester		Hours
Essential Learning Soc/Beh Sci., Humanities, Speech		3
ENGL 112 or SPCH 101 or SPCH 102		3
TSTA/G/D	Electives	11
		17

Spring Semester		Hours
TSTG 220	Industry Employment Practices	3
TSTA/G/D	Electives	9
KINE 100	Health and Wellness	1
KINA xxx	Activity	1
Essential Learning Soc/Beh Sci., Humanities, Speech		3
		17

POLICIES:

1. Please see the catalog for a complete list of graduation requirements.
2. 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.** 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. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature. Finally, the Department Head will submit the signed forms to the Registrar's Office. (Students cannot handle the forms once the advisor signs.)
4. 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.
5. NOTE: The semester before graduation, you may be required to take a Major Field Achievement Test (exit exam).