Advanced Tractor Trailer Driving

Credential Awarded	**Certificate**
Contact Hours	**480**
Program Quarter Credits	**34**
Instructional Weeks	**24**
Total Clock Hours	**including Out-of-Class Work Hours: 600**
Mode of Delivery	**Residential**

Objective

The course material presented in the Advanced Tractor Trailer Driving program is intended to develop usable skills and technical knowledge leading to employment as a Tractor Trailer Driver. Before that employment is possible, the student must pass the Commercial Driver's License tests for the state in which they are licensed. The training offered during this program will provide the students with advanced range and road skill development, and in-depth classroom material. This skill and knowledge enhancement will enable the graduate, upon obtaining entry-level employment, to further develop his or her career as a Tractor Trailer Driver. Upon meeting the graduation requirements and successfully passing the Commercial Driver's License test, the reasonably diligent student will be qualified to enter employment as a tractor trailer driver employed in intrastate and/or interstate commerce. Taking into consideration individual differences, the graduate will be capable of operating a tractor trailer with a vehicle gross weight of 80,000 lbs., an articulated vehicle with a trailer in excess of 10,000 lbs. or a straight vehicle in excess of 26,000 lbs.

Description

The Advanced Tractor Trailer Driving program prepares the graduate to operate a tractor trailer with a vehicle gross weight of 80,000 lbs., an articulated vehicle with a trailer in excess of 10,000 lbs. or a straight vehicle in excess of 26,000 lbs.

Credentialing Exams

Upon successful completion, the graduates will be prepared to test for a Class A Driver's License. Criminal convictions may affect a student's ability to obtain employment as a Commercial Driver.

Career Opportunities

Upon satisfactory completion of the program, students will be qualified to assume entry-level positions as local, regional, or over-the road tractor trailers.

Department of Transportation Federal Motor Carrier Safety Administration Regulation

United States Department of Transportation Federal Motor Carrier Safety Administration regulations require that all Commercial Driver License holders must be able to read and speak English sufficiently to converse with the public, understand highway traffic signs and signals, respond to official inquiries, and complete necessary reports.

Plan of Study

Course Code	Name	Clock Hours	Credits	Quarter Credits
CTD100	Basic Operations	40	0	4
CTD105	Vehicle Systems and Maintenance	40	0	4
CTD110	Defensive Driving and Cargo Documentation	40	0	4

CTD115	CDL Prep and Career Development	40	0	4
CTD120	Trip Planning and Hours of Service	40	0	4
CTD125	Introduction to Vehicle Control	40	0	2
CTD130	Basic Vehicle Control	40	0	2
CTD135	Intermediate Vehicle Control	40	0	2
CTD140	Advanced Vehicle Control	40	0	2
CTD145	Basic Driving Techniques	40	0	2
CTD150	Advanced Driving Techniques	40	0	2
CTD155	CDL Skills/Driving	40	0	2

CTD125, CTD130, CTD135, CTD140, CTD145, CTD150, CTD155: Courses noted with asterisks are taught per the published schedule with behind the wheel training at the commercial driving range satellite location at 320 North Point Road effective 12/31/2022.

Schedule

Morning: Monday through Thursday, 8:00 a.m. - 1:00 p.m.
Afternoon: Monday through Thursday, 1:30 p.m. – 6:30 p.m.
Evening: Monday through Thursday, 6:30 p.m. - 11:30 p.m.
Weekend: Saturday and Sunday, 8:00 a.m. – 6:30 p.m.

Course Descriptions

CTD100 : Basic Operations

This course introduces students to the U.S. Trucking Industry and how it operates. It presents information about the various types of carriers and how they operate within the Department of Transportation regulations. The course will allow the students to gain basic knowledge regarding the control systems of commercial vehicles and know what gauges they should read for safe operation. Also covered is the basic operation of the vehicle, sliding fifth wheel and tandems, coupling and uncoupling, specialized rigs, shifting and the Federal Motor Carriers Safety Administration (FMCSA). Students will also explore “Life Skills Lessons” with an emphasis placed on personal health while driving on the road.

Quarter Credits	**4**
Clock Hours	**40**
Lecture Hours	**40**
Prerequisites	**None**

CTD105 : Vehicle Systems and Maintenance

This course introduces students to the components of a commercial vehicle in order to complete a proper pre-trip inspection and vehicle inspection report. Also covered is the importance of preventative maintenance and reporting malfunctions in accordance with Federal Motor Carrier Safety Administration (FMCSA) regulations Part 392.7 through 392.9 Students will also explore “Life Skills Lessons” with an emphasis on driver stress management and the role it plays in driver safety.

Quarter Credits	**4**
Clock Hours	**40**

Lecture Hours	**40**
Prerequisites	**None**

CTD110 : Defensive Driving and Cargo Documentation

This course will provide the student with information related to their profession, driving and specifically, defensive driving. The goal of this course is to present and review information on how to improve defensive driving skills – skills that may save lives and help avoid collisions and violations. The importance of avoiding skids and jackknives and theory on best ways of driving in the mountains are taught. Students will understand the best way to leave the road and return, how to avoid a head on collision and why driving through an emergency may be better than trying to stop. Accidents do happen. When they happen, the driver must know what to do and what not to do. This course will teach the student what to do at the scene of an accident, how to fill out an accident report, how to protect the scene of an accident and how to conduct himself/herself professionally.

Quarter Credits	**4**
Clock Hours	**40**
Lecture Hours	**40**
Prerequisites	**None**

CTD115 : CDL Prep and Career Development

This course presents material needed for the students to successfully pass the CDL permit exam, which includes: General Knowledge, Combination, and Air Brakes. In addition, an overview of the skills needed to safely operate commercial vehicles is reviewed. The students will prepare to take the CDL learners permit exam in their individual state of residence. Topics such as extreme driving (mountains, snow, ice, etc.) will also be discussed. Students will also explore a “Life Skills Lessons” with an emphasis on employee public relations.

Quarter Credits	**4**
Clock Hours	**40**
Lecture Hours	**40**
Prerequisites	**None**

CTD120 : Trip Planning and Hours of Service

The student will be taught how to plan trips, read an atlas, and recognize different types of computer systems. The course also covers the regulations related to Driver Hours of Service, how to properly fill out a driver’s log book and how to avoid Hours of Service violations, allowing the driver to stay on the road, benefiting both driver and employer. Students will also continue exploration of “Life Skills Lessons” with an emphasis on providing the highest quality customer service and the importance of Time Management.

Quarter Credits	**4**
Clock Hours	**40**
Lecture Hours	**40**
Prerequisites	**None**

CTD125 : Introduction to Vehicle Control

This course will introduce students to the rules of the driving range, basic movements of the vehicle, and how to properly enter and exit the truck. The students will be able to identify and properly operate the various controls of the vehicle, as well as complete a 142-point vehicle inspection of the vehicle. Students will also explore “Life Skills Lessons” with an emphasis on workplace strategies for a successful career. In addition, students will begin “Transportation Industry Awareness Lessons” with a focus on the airbrake system of a tractor trailer.

Quarter Credits	**2**
Clock Hours	**40**
Lab Hours	**40**
Prerequisites	**Successful completion of CTD100, CTD105, CTD110, CTD115, and CTD120. Must also have CDL learner's permit.** **Additionally, a minimum average/overall grade of 80% in the theory courses of the CDL program (CTD100, CTD105. CTD110, CTD115, and CTD120) is required to continue to the range/road courses, beginning with CTD125.**

CTD130 : Basic Vehicle Control

This course will introduce students to straight line backing. After properly adjusting their mirrors, students will move the truck back and forth in a straight 100 ft. line, complete controlled stops, and recover if the vehicle drifts to the left/right. Students will also be introduced to pull-ups which will allow the student to realign the vehicle as needed. Students will also explore “Life Skills Lessons” with an emphasis on job search skills and interviewing techniques. In addition, students will continue “Transportation Industry Awareness Lessons” with a focus on the procedures to drive a tractor trailer down a road with a steep downgrade.

Quarter Credits	**2**
Clock Hours	**40**
Lab Hours	**40**
Prerequisites	**CTD125**

CTD135 : Intermediate Vehicle Control

This course will introduce students to the sight side parallel parking maneuver. Using three basic steps, the students will intentionally maneuver the tractor and trailer in reverse from a parked position into the 100 x 12 box on the left side (driver’s side or sight side) of the vehicle. The students will further enhance mirror usage skills and develop a professional level of competency in the various set-up positions and maneuvering techniques (pull ups & steering adjustments). Students will also explore “Skills Lessons” with an emphasis on stress and organizational management. In addition, students will continue “Transportation Industry Awareness Lessons” with a focus on the procedures to drive a tractor trailer with hazardous materials over a railroad crossing.

Quarter Credits	**2**
Clock Hours	**40**
Lab Hours	**40**
Prerequisites	**CTD130**

CTD140 : Advanced Vehicle Control

This course will introduce the student to the conventional parallel parking maneuver. Using the four steps to backing, in reverse, the student will learn to intentionally move the tractor and trailer into an area the length of the unit plus 15 feet, from the right (passenger's side) and the left side (sight side) of the truck. The students will be able to choose backing targets to successfully complete this maneuver to further enhance mirror usage skills, develop a professional level of competency in the various set up positions and maneuvering techniques (pull ups & steering adjustments). Students will also explore "Life Skills Lessons" with an emphasis on career and life evolutions, such as promotions and/or becoming an owner operator. In addition, students will continue "Transportation Industry Awareness Lessons" with a focus on the Simulated Emergency Pull-over and placement of warning devices.

Quarter Credits	**2**
Clock Hours	**40**
Lab Hours	**40**
Prerequisites	**CTD135**

CTD145 : Basic Driving Techniques

This course will introduce the students to the alley dock maneuver. In reverse, the student will learn to intentionally move the tractor and trailer from a 90-degree angle within a 70 foot space and place the rear of the trailer into a 40 x 12 foot box area. The student will continue skills developed in previous classes and develop a professional level of competency in the various set up positions and maneuvering techniques (pull ups & steering adjustments). Students will also explore "Life Skills Lessons" with an emphasis on human resources and business communication. In addition, students will continue "Transportation Industry Awareness Lessons" with a focus on the FMCSA's CSA Program. Students will be able to identify which gear to use at various speeds and conditions.

Quarter Credits	**2**
Clock Hours	**40**
Lab Hours	**40**
Prerequisites	**CTD140**

CTD150 : Advanced Driving Techniques

In this course, students will begin the "road" portion of their training. In a real-time environment, students will be introduced to driving skills such as how to identify road/traffic hazards, how to avoid hazards and to take evasive action when needed. Students will continue to drive on local highways and identify the importance of vehicle size, road signs, traffic controls, road characteristics, uphill and downhill driving, curves, and construction zones. Students will also explore "Life Skills Lessons" with an emphasis on human resources and business communication. They will also revisit the hours of service and trip planning from previously learned material in the classroom. Students will also explore "Life Skills Lessons" with an emphasis on conflict and resolution.

Quarter Credits	**2**
Clock Hours	**40**
Lab Hours	**40**
Prerequisites	**CTD145**

CTD155 : CDL Skills/Driving

This course will have students continue to build on their previous learned skills and enhance the driver's ability to react to the ever changing driving situation in a busy and unpredictable environment. To assess the student's driving skill level when driving in residential, shopping, and city environments and to prepare the student for the CDL A test to obtain entry-level employment as a Class A driver. The student will be able to spot potential hazards and stationary objects, practice safe operations, understand the importance of maintaining a professional attitude, have an understanding of how to conduct themselves in a professional manner among other drivers, understand traffic controls, stop lines and crosswalks, truck routes and bus corridors and also parking safely to make an emergency stop. Students will continue "Transportation Industry Awareness Lessons" with a focus on load securement of the trailer.

Quarter Credits	**2**
Clock Hours	**40**
Lab Hours	**40**
Prerequisites	**CTD150**