CERTIFICATE IN DIESEL ENGINE SERVICE, DIAGNOSIS AND REPAIR TECHNICIAN

Upon completion of the required courses, students will receive the Diesel Engine Service, Diagnosis and Repair Technician Certificate. This certificate requires the completion of preventative maintenance, engine and engine control and electrical/electronic courses which provide the fundamentals necessary for the servicing of diesel engines. Students completing this certificate would be prepared to work as entry-level technicians on diesel engines operating multiple equipment types including on-highway trucks, off-highway heavy equipment and stationary diesel power generation. This certificate would be the first in the stackable series of certificates for the MTRK program which includes the Medium and Heavy Duty Truck Service, Diagnosis and Repair Master Technician Certificate and the Stationary Power Generation Service, Diagnosis and Repair Technician Certificate.

Learning Outcomes

Certificate of Achievement Student Level Outcomes

Students completing the Diesel Engine Service, Diagnosis and Repair Technician Certificate of Achievement will:

Upon completion of this course of study include students having the knowledge and ability to:

- 1. Explain the theory of operation of diesel engines and their related subsystems.
- 2. Demonstrate safety procedures when working on diesel engines and related electrical systems.
- 3. Communicate effectively to owners and operators of diesel powered trucks the required maintenance and repairs needed.
- 4. Demonstrate a thorough understanding of workplace expectations.
- 5. Apply proper troubleshooting techniques to diagnose and repair diesel engines.

Requirements

| Code Required courses: | Title | Units |
|---------------------------|---------------------------------------------------------------------|-------|
| MTRK 148 | Medium and Heavy Truck Maintenance and Inspection | 6 |
| or MTRK 101 | Introduction to Medium and Heavy Tru Maintenance and Inspection | uck |
| MTRK 152A | Medium and Heavy Truck Engines Service, Diagnosis, and Repair | 6 |
| MTRK 156A | Medium/Heavy Truck Electrical/Electronic Systems I | 5 |

| Code | Title | Units |
|-------------|-----------------------------------------------------------|-------|
| MTRK 156B | Medium/Heavy Truck Electrical/Electronic Systems II | 4 |
| MTRK 159 | Diesel Engine Management Systems | 5 |
| Total Units | | 26 |

Curriculum Map

1-Year Curriculum Map Example

This map represents one possible pathway through the program and is only for reference.

*It is highly recommended that you make an appointment (https://www.citruscollege.edu/stdntsrv/counsel/Pages/ApptSchedule.aspx) to create a customized education plan that fits your needs.

| Course | Title | Units |
|-----------------|------------------------------------------------------------------|-------|
| Fall Term 1 | | |
| MTRK 156A | Medium/Heavy Truck Electrical/Electronic Systems I | 5 |
| MTRK 152A | Medium and Heavy Truck Engines Service, Diagnosis, and Repair | 6 |
| Completion of M | TRK 101 in summer | |
| | Units | 11 |
| Winter Term 1 | | |
| MTRK 156B | Medium/Heavy Truck Electrical/Electronic Systems II | 4 |
| | Units | 4 |
| Spring Term 1 | | |
| MTRK 159 | Diesel Engine Management Systems | 5 |
| | Units | 5 |
| | Total Units | 20 |

Career Information

Career Opportunities

There are a variety of careers you can do with this major.

To explore more about this major, schedule an appointment (https://www.citruscollege.edu/stdntsrv/ctcenter/Pages/ApptSchedule.aspx) with a career counselor.