

**CURRICULUM PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Caldwell Community College and Technical Institute  
Diesel and Heavy Equipment Technology (Diploma) (D60460)**

**Program Planning:** Caldwell Community College and Technical Institute is seeking approval for the Diesel and Heavy Equipment Technology (Diploma) (D60460) program to begin Spring, 2022. The planning area is defined as the college's service area of Caldwell and Watauga counties in addition to Alexander, Avery, Burke, Caldwell, Catawba, McDowell, Mitchell, Yancy, and Watauga counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Caldwell Community College and Technical Institute on April 20, 2021. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Caldwell Community College and Technical Institute have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

**Program Rationale:** Caldwell Community College and Technical Institute (CCC&TI) indicates the following:

- With the transient nature of individuals in rural communities within the state and increased turnover across the state due to retirements, job changes, and relocations, individuals are expected to move in and out of the region for employment opportunities. Across the state of North Carolina, the annual job growth is projected to be 6% through 2028 (O-Net Online, 2021). Diesel and heavy equipment technicians have an annual median salary in the Hickory/Lenoir/Morganton region of \$45,420 (O-Net Online, 2021), which is significantly higher than the median yearly wages in the Mountain North Carolina nonmetropolitan area of \$38,160 (O-Net Online, 2021).
- Companies in the region that maintain diesel and heavy equipment fleets or services the equipment such as Merchants Distributors, Inc., Ryder Transportation, Inc., Penske, Love's, and North Carolina Department of Transportation, Division 13, CCC&TI, have indicated the expected demand to be at least 79 annual jobs in the defined region (JobsEQ February 2021 and reported by companies).

- A partner employer stated: "I am writing you today to inform you of the desperate need of Diesel Technicians throughout North Carolina, but especially here in the western part of the state. I have been in this industry for 20 years, and the lack of qualified technicians in the hiring field at this point in time is staggering. I know it is not just our company who is hurting for Technicians, but the entire transportation industry is seeing a drought in the field." (Ryder Transportation, Inc., February 2021)
- The proposed Diesel and Heavy Equipment program will engage with sister colleges to create partnerships to provide a regional impact on this specialized pipeline of talent. With the lack of diesel and heavy equipment training serving the northwestern part of the state, regional companies and local colleges have advocated for CCC&TI to implement a regional training program similar to their Truck Driver Training program.
- The Diesel and Heavy Equipment Technology program responds to companies' employment needs in Caldwell, Watauga, Catawba, Alexander, McDowell, Burke, Mitchell, Avery, and Yancey counties. Graduates will primarily qualify for jobs as bus and truck technicians and Diesel Engine Specialists, and Mobile Heavy Equipment Mechanics.
- The proposed program will provide new training opportunities for the identified nine-county region, offering students and trainees the potential to earn new credentials and new employment opportunities. Students, incumbent workers, and employers will benefit from the outcomes of the project as they directly correlate to skill attainment, employment, job growth, and sustainability for the transportation service industry.
- A unique aspect of this program is the mobile learning lab that will move between counties to serve high school students; thereby removing access barriers that might exist for students who cannot make it onto campus. With transportable educational components and a modern design, the program will highlight the technical aspects of the program and should increase student interest in this educational pathway. The mobile nature of the classroom is expected to lead to increased student participation due to increased accessibility and increased program completion efficiency.
- Students matriculating through this program will have access to skills needed to prepare for the Automotive Service Excellence (ASE) credentials T2-T8 for diesel and heavy equipment technicians. With these newly acquired skills, students will have opportunities for careers earning higher than the average annual wage in each county.
- The college will be offering the program to HS students under Career and College Promise and was a major consideration regarding the addition of the program. LEAs requested CCC&TI to consider adding the program in the past, but additional resources were required before the college could bring the program back to the region. That was made possible with the help of an approximately \$1.1 million grant from Golden LEAF to renovate college facilities and to purchase the equipment required to get the program started.

**Impact of the Proposed Program on Other Programs:** Twelve community colleges are approved to offer the Diesel and Heavy Equipment Technology (Diploma) (D60460) program. An impact assessment was sent to colleges located in contiguous counties. **No negative impact responses were received.**

**Implementation of Collaborative Plan:** Not applicable.

**Curriculum Design:** The proposed program of study is in compliance with the State Board approved curriculum standard.

**Curriculum Description as Designated on Curriculum Standard:** A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain diesel engines in vehicles such as Heavy Duty Trucks over one ton classification, buses, ships, railroad locomotives, and equipment; as well as stationary diesel engines in electrical generators and related equipment.

**Contact(s):**

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