Program Review
Executive Summary

Diesel Equipment Technology

Majors Reviewed:

- *Diesel Technology (DD), A.A.S*
- *Diesel Technician (DC), Certificate*
- *Electric Power Generation: Diesel Emphasis (DG), A.A.S*
- *Heavy Construction Equipment Technology: Caterpillar Equipment Emphasis (CH), A.A.S*
- *Heavy Construction Equipment Technology: Technician Emphasis (HE), A.A.S*
- *Heavy Construction Equipment Technology: Operator Emphasis (HY), A.A.S*

July 2021

Pennsylvania College of Technology
A Penn State Affiliate

The Penn College Diesel Equipment Technology (DET) program offerings are unique in that they have the technology, resources, industry support and faculty experience to focus on the most popular applications of the diesel equipment technology industry. Students come to PCT to become diesel commercial truck technicians, heavy equipment technicians, Caterpillar technicians, power generation technicians and heavy equipment operators.

A large retiring workforce, advances in technology and a lack of technically focused curricula in secondary education have led to an increased demand for a technologically skilled workforce in the United States. Our society often defines the decline in the number of skilled workers as the “Skills Gap”. Industries using diesel technology have been in a deficit for skilled technicians for over a decade. Demand for all applications of diesel technology and for heavy equipment operators has never been higher.

There exists a large network of employers that hires our students for rewarding careers in industry because of the quality of our programs. This same network of employers provides sponsorships, internships, scholarships, equipment loans, equipment donations and training to support the faculty and students. This large network of employers makes our graduation placement rate almost 100% and helps to keep our programs up-to date as technology changes each year.

One of our many strengths is that we offer dual degree options within our DET majors. A student can complete two associate degrees within three years. Another strength is that we have been able to employ quality faculty who have a vast knowledge of the diesel fields and combined can teach many of the specialty applications across multiple programs.

For many years the DET programs have been heavily enrolled and for many years some of the programs held waitlists due to demand from industry. The last few years have seen declines in enrollment because employers are in such need for technicians and operators that they are forced into hiring workers who would be college prospects. Our biggest competition in recruiting and retaining students are the diesel equipment technology employers. The current waning in enrollment is not the fault of the employers who need employees. These employers would prefer to hire our graduates. Additionally, this problem puts the responsibility of training on the employer. Because of this, we need to find new ways to deliver instruction to a non-traditional workforce. Another obstacle is the inaccurate and dated image of the diesel equipment technology profession among the public, parents and secondary education. It has become the job of employers and educators to make secondary educators and the public aware of the great career opportunities in this field.

The Diesel Equipment Technology faculty are working to find new ways to deliver instruction to meet the needs of the employers and prospective students. The landscape of higher education is changing and the requirements of industry are driving new expectations from higher education. To meet the non-traditional educational needs of industry, DET faculty have produced a new one-year diesel certificate and are exploring with an apprenticeship pilot through Work Force Development. Recruitment and relationship building with CTC programs

and employers is more important than ever, as we build stronger pathways from CTC and secondary high-schools into our programs.