Diesel Technology AAS

Program Learning Outcomes (PLOs)	Measurable Student Learning Outcomes (MSLOs)- PLO Alignment						
	DIE116	DIE118	DIE132	DIE133	DIE215	DIE216	DIE222
1. (Synthesis Level) Model safe procedures in the workplace, per OSHA. (CSLO #2)	✓	✓	✓	✓	✓	✓	✓
2. (Comprehension Level) Explain the fundamentals of diesel engine and fuel system design and operation used in Heavy Equipment. (CSLO #2)	✓		✓	✓	✓	✓	✓
3. (Analysis Level) Diagnose and repair malfunctions related to diesel engines and fuel systems used in Heavy Equipment.(CSLO #4)		✓	✓	✓	✓	✓	✓
4. (Comprehension Level) Explain the fundamentals of power train and chassis system design and operation used in Heavy Equipment.(CSLO #2)	✓				✓	✓	✓
5. (Analysis Level) Diagnose and repair malfunctions related to power train and chassis systems used in Heavy Equipment.(CSLO#4)	✓	✓					
6. (Comprehension Level) Explain the fundamentals of hydraulic, electrical, and electronic systems used in Heavy Equipment. (CSLO #2 & #4)	✓	✓	✓	✓	✓	✓	✓
7. (Analysis Level) Diagnose and repair malfunctions related to hydraulic, electrical, and electronic systems used in Heavy Equipment.(CSLO #4)	✓	✓	✓	✓			
8. (Application Level) Operate Heavy Equipment in accordance with the operator's handbook.(CSLO #2 & #4)	✓						
9. (Application Level) Recondition Heavy Equipment in accordance with the manufacturer's service and repair manual. (CSLO #2 & #4)	✓	✓	✓	✓	✓	✓	✓

Diesel Technology II Certificate

Program Learning Outcomes (PLOs)	Measurable Student Learning Outcomes (MSLOs)- PLO Alignment						
	DIE116	DIE118	DIE132	DIE133	DIE215	DIE216	DIE222
1. (Synthesis Level) Model safe procedures in the workplace, per OSHA. (CSLO 2)	✓	✓	✓	✓	✓	✓	✓
2. (Comprehension Level) Explain the fundamentals of diesel engine and fuel system design and operation used in heavy equipment. (CSLO 2)	✓	✓	✓				✓
3. (Analysis Level) Diagnose and repair malfunctions related to diesel engines and fuel systems used in heavy equipment.(CSLO 4)		✓	✓				✓
4. (Comprehension Level) Explain the fundamentals of power train and chassis system design and operation used in heavy equipment.(CSLO 2)	✓			✓		✓	✓
5. (Analysis Level) Diagnose and repair malfunctions related to power train and chassis systems used in heavy equipment.(CSLO 4)				✓			
6. (Comprehension Level) Explain the fundamentals of hydraulic, electrical, and electronic systems used in heavy equipment. (CSLO 2,4)	✓	✓	✓	✓	✓	✓	✓
7. (Analysis Level) Diagnose and repair malfunctions related to hydraulic, electrical, and electronic systems used in heavy equipment.(CSLO 4)	✓	✓	✓	✓	✓	✓	
8. (Application Level) Operate heavy equipment in accordance with the operator's handbook.(CSLO 2,4)	✓						
9. (Application Level) Recondition heavy equipment in accordance with the manufacturer's service and repair manual. (CSLO 2,4)	✓	✓	✓	✓			