

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

The Diesel/Heavy Equipment program prepares students to enter the workforce as technicians to maintain, diagnose, and repair heavy equipment. The program focuses both on over the road trucks as well as diesel powered heavy equipment, typically used in the construction industry. Students will learn diesel engine and propulsion systems, fuel management systems, related accessory components, as well as hydraulics, welding certifications, and HVAC certifications. All students will be prepared to take ASE certification exams at the completion of the appropriate course. Integral to this program is a paid internship component, allowing students to gain valuable work experience prior to completion of their program, making them more employable.

**STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:**

- Prepare for employment in the Diesel Technology Industry as a Certified Technician.
- Successfully pass the following ASE/NATEF certification exams: ASE T2, ASE T3, ASE T4, ASE T5, ASE T6, ASE T7.
- Successfully pass the AWS D1.1 mild steel horizontal welding certification.
- Successfully pass the IMACA refrigerant handling certification.
- Successfully pass the SP2 safety and pollution prevention certification.

**GENERAL EDUCATION REQUIREMENTS (25 Credits):**

**SPECIAL PROGRAM REQUIREMENTS (52 Credits):**

	CR	SEMESTER		CR	SEMESTER
<b>COMMUNICATIONS:</b> BUS 108, COM 101, 102, 215, ENG 100, 101, 102, 107, 113, 114, 205, JOUR 102, THTR 105	3-5	_____	<b>AC 211</b>	Transport Refrigeration	2 _____
<b>ENGLISH:</b> ENG 107	3	_____	<b>DT 104</b>	Diesel Equipment Service	4 _____
<b>HUMAN RELATIONS:</b> ALS 101, ANTH 101, 112, 201, 205, HIST 105, 106, 107, 150, 151, 210, 247, 260, HMS 130, 135B, 265B, MGT 100B, 283, PHIL 135, PSC 201, PSY 101, 102, 207, 208, 261, SOC	3	_____	<b>DT 115</b>	Diesel/Heavy Equipment Electrical Systems	4 _____
<b>MATHEMATICS:</b> MATH 116 or above (except MATH 122, 123)	3	_____	<b>DT 117</b>	Advanced Diesel/Heavy Equipment Electronics	4 _____
<b>SCIENCE:</b> AST, BIOL, CHEM, EGG 131, 132, ENV, GEOG 103, 104, 117, GEOL, HHP 123B, 124B, PHYS	6	_____	<b>DT 136</b>	Diesel Engine Repair I	4 _____
<b>FINE ARTS/HUMANITIES/ SOCIAL SCIENCES:</b> AM, ANTH, ART, COM, ECON, ENG 223 or above, GEOG 106 or above, HIST, International Languages, Music, PHIL, PSC, PSY, SOC, THTR, WMST 113	3	_____	<b>DT 138</b>	Diesel Engine Repair II	4 _____
<b>U.S. AND NEVADA CONSTITUTIONS:</b> PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4-6	_____	<b>DT 145</b>	Diesel Brake Systems	4 _____
			<b>DT 155</b>	Steering, Suspension and Directional Controls	4 _____
			<b>DT 165</b>	Diesel/Heavy Equipment Heating and Air Conditioning	4 _____
			<b>DT 205</b>	Diesel/Heavy Equipment Drive Train and Axles	4 _____
			<b>DT 295</b>	Internship Co-Op I	2 _____
			<b>DT 296</b>	Internship Co-Op II	2 _____
			<b>DT 297</b>	Internship Co-Op III	2 _____
			<b>MT 108B</b>	Fluid Power (Pneumatics, Hydraulics, Instrumentation)	4 _____
			<b>MTL 223B</b>	Special Topics in Welding Technology	4 _____

**NOTE:** Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

DLS-AAS

**77**  
Total Credits

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.

**Guided Pathway  
Associate of Applied Science Degree (AAS)  
Diesel Heavy Equipment Master Technician  
Total Credits 77**

<b>First Semester</b>	<b>Requirement</b>	<b>Credit Hours</b>	<b>Term</b>
ENG 107	English	3	
ALS 101	Human Relations	3	
DT 104	Diesel Equipment Service	4	
DT 115	Diesel/Heavy Equipment Electrical Systems	4	
DT 117	Advanced Diesel/Heavy Equipment Electronics	4	
	<b>TOTAL</b>	18	
<b>Second Semester</b>	<b>Requirement</b>	<b>Credit Hours</b>	<b>Term</b>
MATH 116 or Higher	Mathematics	3	
BUS 108	Communications	3	
DT 136	Diesel Engine Repair I	4	
DT 138	Diesel Engine Repair II	4	
DT 165	Diesel/Heavy Equipment Heating, Air Conditioning	4	
	<b>TOTAL</b>	18	
<b>Third Semester</b>	<b>Requirement</b>	<b>Credit Hours</b>	<b>Term</b>
DT 145	Diesel Brake Systems	4	
DT 155	Steering, Suspension/Hydraulic Directional Controls	4	
MT 108	Fluid Power (Pneumatics, hydraulics, Instrumentation)	4	
Science		3	
Fine Arts/Humanities		3	
	<b>TOTAL</b>	18	
<b>Fourth Semester</b>	<b>Requirement</b>	<b>Credit Hours</b>	<b>Term</b>
AC 211	Transport Refrigeration	2	
MTL 223	Special Topics in Welding Technology	4	
DT 205	Diesel/Heavy Equipment Drive Train/Axles	4	
SCIENCE		3	
	<b>TOTAL</b>	13	
<b>Fifth Semester</b>	<b>Requirement</b>	<b>Credit Hours</b>	<b>Term</b>
DT 295	Internship Co-Op I	2	
DT 296	Internship Co-Op II	2	
DT 297	Internship Co-Op III	2	
PSC 101	US/NEVADA Constitutions	4	
	<b>TOTAL</b>	10	
	<b>Degree TOTAL</b>	<b>77</b>	