

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

**Curriculum Code: 1055
(Effective Fall 2018 –
Summer 2023)**

Heavy Equipment Repair Technician A.A.S. Pathway

A heavy equipment repair technician is responsible for the efficient, timely, and proper repair on a variety of heavy-duty construction and road equipment. The technician must be knowledgeable in repair of all systems used in heavy equipment including diesel engines, fuel systems, powertrain, electronics, and hydraulics. The technician must be able to diagnose problems, plan repairs including required labor and parts, and then complete the repair. Repairs must be completed with consideration to safety, MIOSHA, and environmental guidelines. A repair technician must be able to work with a minimum of supervision as repairs may be made off site. Attention to detail and a sense of responsibility are required. Students completing this curriculum may also be eligible to apply for a certificate in Heavy Equipment Repair (1041).

All Heavy Equipment Repair (HERT) courses are taught at AIS Construction, 3600 N. Grand River Ave. in Lansing. In addition, one of the courses may be taught by the AIS Construction staff.

For More Information

Contact the Heavy Equipment Repair Program at the West Campus Building, Room M103, telephone number (517) 267-6406.

Semester I Fall	Course Title	Prerequisites	Credit/Billing Hours
Writing Core Area - <i>Select 1</i>			
ENGL 124	Technical Writing	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	3 / 3
Program of Study Requirements			
HERT 110	Equipment Introduction	None	5 / 5
HERT 120	Heavy Engine Rebuild	None	6 / 6
WELD 102	Industrial/Construction Safety	Reading Level 3 and Writing Level 2	2 / 3
Credits			16 / 17

Semester II Spring	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
AUTM 161	Auto Heating/Air Conditioning	Minimum 2.0 in ((AUTM 111 or concurrently) or (HERT 125 or concurrently) or AUTM 110) and (Reading Level 3 or ENGL 098 concurrently) and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106)	4 / 6
HERT 125	Heavy Equipment Electronics	None	5 / 5
HERT 140	Equipment Powertrain	None	5 / 5
Credits			14 / 16
Semester III Summer	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
HERT 135	Diesel Fuel System	None	4 / 4
HERT 145	Equipment Service Writing	None	4 / 4
Credits			8 / 8
Semester IV Fall	Course Title	Prerequisites	Credit/Billing Hours
Math Core Area - <i>Select 1</i>			
MATH 115	Technical Math II	(Minimum 2.0 in MATH 114 within 2 years or Math Level 5 within 2 years) and Reading Level 5	4 / 4
Communication Core Area - <i>Select 1</i>			
COMM 110	Oral Comm in the Workplace	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	3 / 3
Program of Study Requirements			
HERT 130	Equipment Hydraulics	None	6 / 6
Credits			13 / 13

Semester V Spring	Course Title	Prerequisites	Credit/Billing Hours
Science Core Area - <i>Select 1</i>			
BIOL 120	Environmental Science	(Reading Level 5 or ENGL 099 concurrently) and Writing Level 6	4 / 6
Global Perspectives and Diversity Core Area - <i>Select 1</i>			
MGMT 234	Diversity in the Workplace	Reading Level 5 and Writing Level 6	3 / 3
Electives - <i>Select 1</i>			
HERT 210	Heavy Equipment Internship	Department Approval	3 / 3
MGMT 150	Managing Customer Relations	Reading Level 5 and Writing Level 6	3 / 3
WELD 103	Combination Welding	Reading Level 3 and Writing Level 2	4 / 6
Credits			10-11 / 12-15
Total Credits			61-62 / 66-69