

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Heavy Equipment Repair Technician
Associate in Applied Science

Curriculum Code: 1055 (Effective Fall 2016 – Summer 2021)

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.

PREREQUISITES

Students should see [Course Descriptions](#) for course prerequisite information. See [Academic Assessment and Placement Testing for Student Success](#) for skills assessment and advising information.

INFORMATION

Contact the Heavy Equipment Repair Program located at the West Campus Building, Room M103, telephone number (517) 267-6406 (Website: www.lcc.edu/transportation/heavy equip_repair/).

REQUIREMENTS

CODE	TITLE	TOTAL: 44 CREDITS CREDIT HOURS
HERT 110	Equipment Introduction	5
HERT 120	Heavy Engine Rebuild	6
HERT 125	Heavy Equipment Electronics	5
HERT 130	Equipment Hydraulics	6
HERT 135	Diesel Fuel System	4
HERT 140	Equipment Powertrain	5
HERT 145	Equipment Service Wiring	4
WELD 102	Industrial/Construction Safety (See Note 1)	2
WELD 103	Combination Welding	4
WRIT 124	Technical Writing	3

LIMITED CHOICE REQUIREMENTS**TOTAL: 16–22 CREDITS**Complete the indicated number of credits from **EACH CHOICE** listed below.**CHOICE 1: [General Education Core Areas](#)****13–18 Credits**

(Click the link above for information on how to fulfill these requirements. Core area proficiency exams, where appropriate, are available for each core area.)

Communication Core Area	3–4
Global Perspectives and Diversity Core Area	3–4
Mathematics Core Area	3–5
Science Core Area	4–5
Writing Core Area (See Note 2)	0

CHOICE 2:**3–4 Credits**

HERT 210	Heavy Equipment Internship	3
MGMT 150	Managing Customer Relations	3
WELD 105	Advanced ARC Welding	4

MINIMUM TOTAL 60**NOTES:**

1. Students who have already completed DCTM 102, ELTE 102, HVAC 102 or METS 102 with a grade of 2.0 or higher may substitute one of these courses for WELD 102.
2. Students completing “REQUIREMENTS” have fulfilled the requirements for this Core area.

SUGGESTED COURSE SEQUENCE

This program is presented in a lockstep format. It is therefore essential that prospective students consult with a Transportation Maintenance Technologies Program advisor to plan their course sequence so that they may complete their education and training in a timely manner.

I	II	III	IV
HERT 110	HERT 125	HERT 135	HERT 130
HERT 120	HERT 140	HERT 145	Lim.Ch.1
WELD 102	WELD 103		Lim.Ch.1
WRIT 124			
V			
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			Lim.Ch.1
			Lim.Ch.1
			Lim.Ch.2