

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Heavy Equipment Repair Technician
Associate in Applied Science

Curriculum Code: 1055 (Effective Fall 2009 – Summer 2014)

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 several 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.

PREREQUISITES

Students should see *Course Descriptions* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

INFORMATION

Contact the Transportation and Engineering Technologies Department located at the West Campus Building, Room M103, telephone number (517) 267-6406.

REQUIREMENTS (See Note 1)

CODE	TITLE	TOTAL: 50 CREDITS CREDIT HOURS
AUTO 100	Automotive Service I	3
AUTO 160	Auto Heating/Air Conditioning	3
HEOT 100	Equipment Introduction	5
HERT 100	Heavy Engine Rebuild	6
HERT 101	Heavy Equipment Electronics	5
HERT 102	Equipment Hydraulics	6
HERT 103	Diesel Fuel System	4
HERT 104	Equipment Powertrain	5
HERT 105	Equipment Service Writing	4
WELD 102	Industrial/Construction Safety (See Note 2)	2
WELD 103	Combination Welding (See Note 2)	4
WRIT 124	Technical Writing	3

LIMITED CHOICE REQUIREMENTS

TOTAL: 15-21 CREDITS

Complete the indicated number of credits from EACH CHOICE listed below.

CHOICE 1: General Education Core Areas

12-17 Credits

(See *General Education Core Requirements* 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	3-4
Science Core Area	3-5
Writing Core Area (See Note 3)	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	65

NOTES:

1. Students must obtain department approval from the Transportation Technologies Department prior to registering for HERT and HEOT courses.
2. Students who have already completed ELTE 102, HVAC 102, or METS 102 with a grade of 2.0 or higher may substitute one of these courses for WELD 102. Any of these four courses may also be used to fulfill the prerequisite for WELD 103.
3. 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 Technologies Department advisor to plan their course sequence so that they may complete their education and training in a timely manner.

I	II	III	IV
AUTO 100	HERT 101	HERT 103	HERT 102
HEOT 100	HERT 104	HERT 105	Lim.Ch.1
HERT 100	WELD 102		Lim.Ch.1
WRIT 124	WELD 103		
V			
AUTO 160			
Lim.Ch.1			
Lim.Ch.1			
Lim.Ch.2			