Heavy Equipment Repair Technician A.A.S.

Career Community: Transportation
Curriculum Code: 1055
Effective: Fall 2022 – Summer 2027

Description

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 the Heavy Equipment Repair Certificate of Achievement (1041).

Milestone

In addition to the required General Education courses in Math and English, completion of HERT 120 and HERT 125 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

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.

Contact Information

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

General Education - Applied Degrees, Recommended Courses

(For the full list of options, see General Education)

- English Composition or Applied English – *Select one*
  ENGL 124, Technical Writing, 3 credits / 3 billing hours

- English Composition (Second Course)/Communications or Applied Communications – *Select one*
  COMM 110, Communication in the Workplace, 3 credits / 3 billing hours

- Humanities and Fine Arts or Social Sciences or Applied Social Sciences – *Select one*
  MGMT 234, Diversity in the Workplace, 3 credits / 3 billing hours

- Mathematics or Applied Mathematics – *Select one*
  MATH 115, Technical Math II, 4 credits / 4 billing hours

- Natural Sciences Lab or Applied Science and Technology Lab – *Select one*
  BIOL 120, Environmental Science, 4 credits / 6 billing hours

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
HERT 110	Equipment Introduction	5 / 5
HERT 120	Heavy Engine Rebuild	6 / 6
HERT 125	Heavy Equipment Electronics	5 / 5
HERT 130	Equipment Hydraulics	6 / 6
HERT 135	Diesel Fuel System	4 / 4
HERT 140	Equipment Powertrain	5 / 5
HERT 145	Equipment Service Writing	4 / 4
HERT 160	Equipment HVAC/Cab Controls	4 / 6
TECH 102	General Industry Safety	2 / 3

Program of Study Required Courses, Limited Choice – *Select one*

Course Code	Course Title	Credit / Billing Hours
HERT 210	Heavy Equipment Internship	3 / 3
MGMT 150	Managing Customer Relations	3 / 3
WELD 103	Combination Welding	4 / 6

Minimum Total Credit Hours

61 credits / 66 billing hours

Recommended Course Sequence

Semester I (Fall)
Gen Ed – English Composition or Applied English
HERT 110
HERT 120 – Milestone course
TECH 102

Semester II (Spring)
HERT 125 – Milestone course
HERT 140
HERT 160

Semester III (Summer)
HERT 135
HERT 145

Semester IV (Fall)
Gen Ed – English Composition (Second Course)/ Communications or Applied Communications
Gen Ed – Mathematics or Applied Mathematics
HERT 130

Semester V (Spring)
Gen Ed – Humanities and Fine Arts or Social Sciences or Applied Social Sciences
Gen Ed – Natural Sciences Lab or Applied Science and Technology Lab
Limited Choice

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.