

# AIS Customer Technical Course Schedule

## Fall Classes

5-day Hydraulics:

November 3rd-7th, 2025

5-day Electrical:

November 17th-21st, 2025

## Winter Classes

2-day General Hydraulics:

February 2nd-3rd, 2026

2-day Applied Hydraulics:

February 9th-10th, 2026

2-day Advanced Hydraulics:

February 16th-17th, 2026

2-day General Electrical:

February 5th-6th, 2026

2-day Applied Electrical:

February 12th-13th, 2026

2-day Advanced Electrical:

February 19th-20th, 2026

DOT Inspection

March 4-5, 2026

## Spring Classes

5-day Hydraulics:

April 27th-May 1st, 2026

5-day Electrical:

May 11th-15th, 2026

Final Tier 4 Engine overview and Diagnostics:

May 21st-22nd, 2026

Final Tier 4 Engine overview and Diagnostics:

May 28th -29th, 2026

## Summer Classes

3-day Air Conditioning class:

August 12th-14th, 2026

3-day Air Conditioning class:

August 19th-21st, 2026

3-day Air Conditioning class:

The AIS Training Center offers quality, industry recognized Heavy Equipment Operator and Service Technician Training

### LANSING

3600 N. Grand River Ave.

Lansing, MI 48906

Phone: (517) 321-8000

### GRAND RAPIDS

600 AIS Drive Southwest

Grand Rapids, MI 49548

Phone: (616) 538-2400

### DETROIT

5655 Pontiac Trail

New Hudson, MI 48165

Phone: (248) 437-8121

### TRAVERSE CITY

8300 M-72 East

Williamsburg, MI 49690

Phone: (231) 267-5060

### SAGINAW

4600 AIS Drive

Bridgeport, MI 48722

Phone: (989) 777-0090

### RICHMOND

65809 Gratiot Avenue

Lenox, MI 48050

Phone: (586) 727-7311

**AIS courses offer students the best of small class sizes, a learning environment that encourages interaction and first-class hands-on learning activities that enhance their skills, “tools” that they can put to work immediately!**



**TRAINING CENTER & TECHNICAL INSTITUTE**

**CUSTOMER FUNDAMENTALS TRAINING**

**517-321-8000**

# Hydraulics

## GENERAL HYDRAULICS

Pascals law, hydraulic principles, open/closed loop systems, open/closed center systems, hydraulic schematic introduction, hydraulic system overview.

## ADVANCED HYDRAULICS

Technicians enhance their understanding of hydraulic diagnostics, Pressure compensation, Load-sensing, relieve valve testing/adjustment, PC adjustments, LS differential adjustments, Pilot systems, schematic reading and interpretation, PM tune-up a variety of hydraulic issues.

## APPLIED HYDRAULICS

Technicians perform disassembly, inspection, and assembly of Pumps, valves, and cylinders. Technicians will conduct pump flow testing, cycle time testing, and power-checking hydraulic cylinders.

# Inspection

Discuss the inspection criteria, minimum periodic inspection standards, familiarization with & comparison of the North American Uniform Vehicle Inspection Procedures, the differences between Out-of-Service-Criteria and the FHWA Annual Inspection, identifying defective parts, requirements for the periodic inspection (including proper documentation), the tools necessary to perform a safe and effective inspection & provide participants with a systematic inspection procedure

# Engines

## Final Tier 4 Engines Overview and Diagnostics 2 day

Covers an overview of the different engine EPA Tier standards and components, including DOC, DPF, fuel dosing, EGR, VGTs, SCR, and DEF. DPR regeneration and DEF injection is covered. Many different diagnostic testing procedures are explained and students complete hands-on testing on engines.

# HVAC

3 day

Covers overview of an Air Conditioning system and all components involved. Students conduct hands-on diagnostics and testing including using A/C machines and tanks/scale to recover, evacuate, charge, pressure test, and find leaks on Air conditioning systems. The last day of class students attempt the EPA 609 certification exam to earn a 609 certification. (Cost of exam is included in cost of the class)..

**1-day Class: \$400 per person**  
**2-day Class: \$800 per person**  
**3-day Class: \$1200 per person**  
**5-day class: \$2000 per person**

# Electrical

## GENERAL ELECTRICAL

Introduces students to a core foundation of electrical systems used in the heavy equipment industry. Technicians will be taught Ohm's law, Atomic structure, AC/DC, electron flow, Ohms Law, Circuits, and an introduction on meter use and schematic reading.

## APPLIED ELECTRICAL

The technician will perform basic testing on starting and charging systems, Batteries, starting circuits, charging circuits, and individual component testing, as well as further testing with meters and schematics.

## ADVANCED ELECTRICAL

Technicians explore hands on electrical diagnostics and troubleshooting on 2-wire/3-wire circuits, ECM, CAN, as well as reading and troubleshooting Diagnostic Trouble Codes (DTCs). adjustments, LS differential adjustments, Pilot systems, schematic reading and interpretation, PM tune-up a variety of hydraulic issues.

# Class Options

*Hydraulic & Electrical classes are offered in 2 formats*

*2 Day classes General - Applied - Advanced*

*5 Day classes All 3 stand alone core classes offered in 1 week*

Classes are located at AIS Lansing, class starts at 8:00am—5:00pm. Lunch is provided along with coffee and refreshments in the morning.



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