

Course Code: AGC 112

Course Title: AGCO Power Generation I

Department: Agricultural Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 47.0605

Repeatability: 0

Credit Hours

Catalog Notation: 3-3-4

Credit Hour Distribution:

Lecture: 3

Lab: 3

Clinical: 0

Total: 4

General Course Information

Catalog Description

Complete overhaul of a diesel engine and return to field service using an appropriate company service manual; disassembly and reassembly procedure, measuring for wear, machining and overhaul procedures common to a dealership, tune-up and break-in procedures.

General Course Objectives

- To learn operating principles of a diesel engine.
- To completely disassemble and reassemble a diesel engine.
- Learn how to measure all components for wear and evaluate when to replace or repair.
- Learn what machining can be done to various components.
- Learn proper tune-up skills.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 060

Prerequisites

None

Methods of Evaluation

Students will be given a minimum of 10 chapter quizzes, 10 chapter assignments, 2 unit exams, and 1 unit lab practical.

Instructional Materials and Additional Supplies

- Diesel Technology, 978-1-61960-832-0
- Diesel Technology Workbook, 978-1-61960-835-1
- Students will need the required tool sets for the AGCO Technician program.

Course Content

General Learning Outcomes (GLOs)

- Critical Thinking and Information Literacy: Students will demonstrate the ability to evaluate perspectives, evidence, and implications, and to locate, assess, and use information effectively.
- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Diesel Engine Operating Principles and Theory	1. Describe diesel engine theory and why diesel engines run.	20	7	0
Diesel Engine Disassembly	1. Completely disassemble an engine, following company manuals.	10	17	0
Measuring	1. Read and use all engine measuring tools. 2. Measure engine components for wear.	5	2	0
Engine Machining	1. Describe what components can be machined in a diesel engine.	2	2	0
Diesel Engine Assembly	1. Reassemble the diesel engine previously disassembled, following proper assembly procedures in the manufacturer's manuals.	8	17	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	45	0