

# AGRICULTURAL MECHANICS CERTIFICATE

---

## Major Code: 3166

Provides students a one-year college-level experience of specialized training in Agricultural Mechanics. The agricultural mechanics certificate program provides fundamental skills for technician service positions in agricultural equipment market. Students training in components, systems and service knowledge of tractors and other agricultural machines. Included are subject areas such as hydraulics, electricity, electronics, diesel engines, agricultural machinery, transmissions, small power equipment and other related topics.

Upon successful completion of this certificate program, students will be able to:

- Describe the mechanical function of the compression-ignition engines and modern agricultural equipment.
- Compare the electrical systems and electronic controls used in agricultural equipment.
- Recognize agricultural hydraulic systems, components and control systems used for transmitting hydraulic power.
- Demonstrate the ability to accurately and efficiently diagnose and repair failures in agricultural mechanical, electrical and hydraulic systems.

A minimum of 27 credits is required for certificate completion.

Code	Title	Credits
<b>Required Coursework</b>		
AGEN 100	Equipment Care & Maintenance	3
AGEN 105	Principles of Farm Machinery	2
AGEN 131	Fundamentals of Hydraulics	3
AGEN 161	Basic Hydraulics	3
AGEN 210	Advanced Small Power Equipment	3
AGEN 220	Main,Rep, Perf Tune Artic Cat	4
DTEC 125	Diesel Electrical Systems	4
DTEC 225	Diesel Electronics	4
AUTO 260	Auto Air Cond & Refrg Recovery	1
<b>Optional Coursework</b>		
DTEC 290	Diesel Equip Tech Internship 1	1
<b>Total Credits</b>		<b>28</b>