

APPLIED ENGINEERING & TECHNOLOGIES

AGRICULTURAL SYSTEMS TECHNOLOGY

Agricultural Systems Technology Degree - A60410

Agricultural Systems Technology is designed to provide individuals with the knowledge and skills needed to repair agricultural equipment.

The coursework includes diesel engines, power trains, hydraulics, electrical systems, and fuel systems. Other topics include time management, inventory, and parts control.

Graduates of the curriculum should qualify for entry-level employment opportunities in a dealership as technicians qualified to be contributing members of the work team.

Agricultural Systems Technology Diploma - D60410

The Agricultural Systems Technology Diploma prepares individuals to maintain and repair specialized farm, ranch, and agribusiness power equipment and vehicles including terrestrial and airborne crop-spraying equipment; tractors and hauling equipment; planting and harvesting equipment; cutting equipment; power sources and systems for silos; irrigation and pumping equipment; dairy, feeding, and shearing operations; and processing systems.

Program Sequence

First Semester

| | | |
|----------|---|---|
| ENG 110 | Freshman Composition | 3 |
| HUM 121 | The Nature of America | 3 |
| TRN 110 | Introduction to Transportation Technology | 2 |
| TRN 120 | Basic Transportation Electricity | 5 |
| TRN 120A | Basic Transportation Electricity Lab | 1 |
| TRN 140 | Transportation Climate Control | 2 |
| TRN 170 | PC Skills for Transportation..... | 2 |
| | Major Elective | 2 |

Second Semester

| | | |
|---------|--|---|
| HET 110 | Diesel Engines | 6 |
| HET 134 | Diesel Fuel and Power System | 3 |
| HYD 112 | Hydraulics – Medium and Heavy Duty | 2 |
| MAT 110 | Math Measurement and Literacy | 3 |
| PME 112 | Consumer Products..... | 2 |

Third Semester

| | | |
|---------|-------------------------------------|---|
| PME 111 | Harvest and Spraying Equipment..... | 4 |
| | Work-Based Learning Elective | 2 |

Fourth Semester

| | | |
|---------|--|---|
| COM 120 | Intro to Interpersonal Communication | 3 |
| HET 114 | Power Trains | 5 |
| HYD 134 | Hydraulic/Hydrostatic Construction | 4 |
| PME 121 | Component Controls | 2 |
| PSY 118 | Interpersonal Psychology | 3 |

Fifth Semester

| | | |
|---------|--------------------------------|---|
| ELN 112 | Diesel Electronics System..... | 4 |
| PME 122 | Agricultural Telematics | 3 |
| | Major Elective | 4 |

Completes Agricultural Systems Technology Diploma (D60410):
 ELN 112, ENG 110, HET 110, HET 114, HET 134, HYD 134, PME 111, PME 112, PME 121, PSY 118, TRN 110, TRN 120, TRN 120A, TRN 140, TRN 170

Major Electives

(Select 6 hours from the following courses):

| | | |
|---------|--------------------------------|---|
| ELN 110 | Survey of Electronics | 3 |
| ELN 113 | Electronic Fuel Injection..... | 2 |
| HET 115 | Electronic Engines | 3 |
| HET 128 | Medium/Heavy Duty Tune-up..... | 2 |
| PME 211 | Adv Equipment Repair | 4 |

Work-Based Learning Electives

(Select 2 hours from the following courses):

| | | |
|---------|------------------------------|---|
| WBL 111 | Work-Based Learning I | 1 |
| WBL 112 | Work-Based Learning I | 2 |
| WBL 121 | Work-Based Learning II | 1 |

Graduation Requirements 70 Credit Hours