

# South Central College Program Design

# **DIP 3155 Agriculture Technician**

## **Program Information**

Instructional Level Technical Diploma

Career Cluster Agriculture, Food & Natural Resources

## **Description**

The diploma is designed to prepare a learner for entry level career opportunities in the diesel, farm equipment, and industrial mechanics fields. Learners will diagnose and repair engines, fuel systems, power trains, electrical systems, hydraulics, air conditioning, and related machinery. With additional training and experience many technicians become shop foreman, service managers or open their own business. This diploma is designed for the learner who has prior training in the field or credit for life experience. A pretest or prior course work is required for admittance to this program.

## **Program Admission Dates (Fall and/or Spring)**

Fall and Spring

#### **Program Location (North Mankato and/or Faribault)**

North Mankato

#### **Program Student Learning Outcomes**

- 1 Demonstrate effective participation on an agribusiness team
- 2 Perform assembly, repair, operation, and adjustment of machinery and power units
- 3 Conduct trouble shooting of agricultural power units and machinery
- 4 Diagnose and repair tractor systems and equipment
- 5 Perform work using appropriate safety practices
- 6 Perform troubleshooting and diagnosis on an independent capstone project

## **Program Configurations**

**Fall Start** 

Credits

Technical Course

Elective

36

# Semester 1 - Fall

| Course #           | Course Title   | Credits | Function         |
|--------------------|--|---------|------------------|
| AGME 2832          | Hyd-Assist/Hydrostatic Transmissions   | 2       | Technical Course |
| AGME 2841          | Air Conditioning   | 1       | Technical Course |
| AGME 2852          | Introduction to Diesel   | 1       | Technical Course |
| AGME 2882          | Ag Tech Seminar  | 1       | Technical Course |
| AGME 2945          | Tractor/Equipment Repair I   | 3       | Technical Course |
| AGME 2892          | Hydraulic Theory and Diagnosis   | 4       | Technical Course |
| Technical Elective | Select from courses in AGBS, AGEC, AGRI,<br>ANSC, MEAG, PLSC, SGAG, SWPR, OTEC,<br>or HLTH | 1       | Elective         |

Semester 2 - Spring

| Course #            | Course Title  | Credits | Function         |
|---------------------|---|---------|------------------|
| AGME 2853           | Diesel Injection (Pumps)                                      | 3       | Technical Course |
| AGME 2946           | Tractor/Equipment Repair II                                   | 4       | Technical Course |
| AGME 2947           | Tractor/Equipment Diagnosis and Repair                        | 4       | Technical Course |
| AGME 2863           | Adv Ag Electrical   | 2       | Technical Course |
| OTEC 1001 -or- 1790 | Computer Software for College -or-<br>Keyboarding for College | 2       | Technical Course |

# **Summer Semester**

| Course #  | Course Title               | Credits | Function         |
|-----------|----------------------------|---------|------------------|
| AGME 2940 | Ag Service Tech Internship | 9       | Technical Course |

# **Program Course List**

| Number           | Title                                | Credits | Pre/Corequisites                |
|------------------|--------------------------------------|---------|---------------------------------|
| <b>AGME 2832</b> | Hyd-Assist/Hydrostatic Transmissions | 2       | AGME 1821                       |
|                  |                                      |         | AGME 1831                       |
| <b>AGME 2841</b> | Air Conditioning                     | 1       | None                            |
| <b>AGME 2852</b> | Introduction to Diesel               | 1       | None                            |
| <b>AGME 2853</b> | Diesel Injection (Pumps)             | 3       | None                            |
| <b>AGME 2863</b> | Adv Ag Electrical                    | 2       | Prerequisites: AGME861          |
| <b>AGME 2882</b> | Ag Tech Seminar                      | 1       | None                            |
| <b>AGME 2892</b> | Hydraulic Theory and Diagnosis       | 4       | None                            |
| AGME 2945        | Tractor/Equipment Repair I           | 3       | Enrolled in Agriculture Service |
|                  |                                      |         | Technician Program              |

| <b>AGME 2946</b> | Tractor/Equipment Repair II            | 4 | AGME2945              |
|------------------|--|---|-----------------------|
| AGME 2947        | Tractor/Equipment Diagnosis and Repair | 4 | AGME2863<br>AGME 2945 |