



**South Central College
Program Design**

DIP 3139 Agriculture and Diesel Service Technician

Program Information

Instructional Level Technical Diploma

Career Cluster Agriculture, Food & Natural Resources

Description

This program is designed to prepare a student for entry-level career opportunities in the diesel, farm equipment and industrial mechanics fields. Students 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.

Program Student Learning Outcomes

- 1 Perform assembly, repair, operation, and adjustment of machinery and power units
- 2 Conduct troubleshooting of agricultural power units and machinery
- 3 Diagnose and repair tractor systems and equipment
- 4 Perform parts department operations
- 5 Perform metal welding and fabrication
- 6 Perform work using appropriate safety practices
- 7 Perform troubleshooting and Diagnosis on an independent capstone project
- 8 Demonstrate effective participation on an agribusiness team

Program Configurations

Agribusiness Service Technician 72 Credit Diploma

Credits

Technical Course	65
Liberal Arts & Sciences	6
Elective	1
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Total Credits	72

Semester One (Fall)

Course #	Course Title	Credits	Function
AGME 1801	Outdoor Power Equipment	3	Technical Course
AGME 1812	Machinery Assembly and Reconditioning I	2	Technical Course
AGME 1813	Machinery Assembly, Operation, Adjust. & Reconditioning II	2	Technical Course
AGME 1821	Precision Measuring Tools	1	Technical Course
AGME 1831	Tractor Power Trains	3	Technical Course
AGME 1881	Parts Department Operation	1	Technical Course
AGME 1930	Ag Welding	2	Technical Course
SGAG 1000	Agribusiness Orientation	1	Technical Course
AGME 1891	Hydraulic Theory 1	1	Technical Course

Semester Two (Spring)

Course #	Course Title	Credits	Function
AGME 1822	Gas/Diesel Engine Repair I	3	Technical Course
AGME 1823	Engine Support	3	Technical Course
AGME 1923	Gas/Diesel Repair II	4	Technical Course
AGME 1861	Tractor Electrical	3	Technical Course
LAS Courses	Based on student need- see Advisor	2	Liberal Arts & Sciences
AGME 2940	Agribusiness Service Technician Internship	4	Technical Course

Summer

Course #	Course Title	Credits	Function
AGME 2940	Agribusiness Service Technician Internship	7	Technical Course

Semester Three (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 2945	Tractor/Equipment Repair I	3	Technical Course
AGME 2882	Ag Tech Seminar	1	Technical Course
AGME 2892	Hydraulic Theory and Diagnosis	4	Technical Course
LAS Courses	Based on student need - see Advisor	2	Liberal Arts & Sciences

Semester four (Spring)

Course #	Course Title	Credits	Function
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AGME 2947	Tractor/Equipment Diagnosis and Repair	4	Technical Course
AGME 2946	Tractor/Equipment Repair II	4	Technical Course
AGME 2863	Adv Ag Electrical	2	Technical Course
AGME 2853	Diesel Injection (Pumps)	3	Technical Course
Tech. Electives	Student Choices Include: AGBS 2005 AGBS 2015 AGBS 2995 AGME 2945 AGME 2946 AGME 2947 PLSC 1205	1	Elective
LAS Courses	Based on student need - see Advisor	2	Liberal Arts & Sciences

Program Course List

Number	Title	Credits	Pre/Corequisites
AGME 1801	Outdoor Power Equipment	3	Enrolled in Ag Service Technician Program
AGME 1812	Machinery Assembly and Reconditioning I	2	Enrolled in Ag Service Technician Program
AGME 1813	Machinery Assembly, Operation, Adjust. & Reconditioning II	2	Enrolled in Agriculture Service Tech Program
AGME 1821	Precision Measuring Tools	1	NONE
AGME 1822	Gas/Diesel Engine Repair I	3	None
AGME 1823	Engine Support	3	AGME1821 Taken in conjunction with AGME1822
AGME 1831	Tractor Power Trains	3	None
AGME 1861	Tractor Electrical	3	Enrolled in Ag Service Technician Program, or with instructor approval
AGME 1881	Parts Department Operation	1	None
AGME 1891	Hydraulic Theory 1	1	Enrolled in Ag Service Tech Program, or with instructor approval
AGME 1923	Gas/Diesel Repair II	4	Enrolled in the Agribusiness Service Technician Program
AGME 1930	Ag Welding	2	None
AGME 2832	Hyd-Assist/Hydrostatic Transmissions	2	AGME 1821 AGME 1831
AGME 2841	Air Conditioning	1	None
AGME 2852	Introduction to Diesel	1	None
AGME 2853	Diesel Injection (Pumps)	3	None
AGME 2863	Adv Ag Electrical	2	Prerequisites: AGME861
AGME 2882	Ag Tech Seminar	1	None
AGME 2892	Hydraulic Theory and Diagnosis	4	None

AGME 2940	Agribusiness Service Technician Internship	9	To be developed on an individual basis. Enrolled in Agribusiness Service Technician Program
AGME 2945	Tractor/Equipment Repair I	3	Enrolled in Agriculture Service Technician Program
AGME 2946	Tractor/Equipment Repair II	4	AGME2945
AGME 2947	Tractor/Equipment Diagnosis and Repair	4	AGME2863 AGME 2945
SGAG 1000	Agribusiness Orientation	1	Enrolled in the Agribusiness Program