AGRICULTURAL EQUIPMENT TECHNICIAN APPRENTICESHIP COURSE SUMMARIES

COURSE AEA3400: TOOLS & MATERIALS

Students develop knowledge, skills and attitudes in the areas of material handling, fastening devices, sealing systems, measuring tools and hand tools.

Prerequisite: AEA3900: Apprenticeship Safety

COURSE AEA3405: WELDING EQUIPMENT

Students operate equipment in a safe manner and perform welding operations such as metal cutting and tack welding.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3410: ELECTRIC WELDING

Students operate equipment in a safe manner and perform welding operations such as metal cutting and tack welding.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials, AEA3405: Welding Equipment

COURSE AEA3415: ELECTRICAL FUNDAMENTALS

Students develop knowledge, skills and attitudes in electrical principles and magnetism; use electrical test equipment; and learn to read electrical schematics. *Prerequisites:* AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3420: CURRENT & RESISTANCE

Students develop knowledge, skills and attitudes in electrical principles; use electrical test equipment; and learn to read electrical schematics.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials, AEA3415: Electrical Fundamentals

COURSE AEA3425: BATTERIES & DIAGNOSTICS

Students develop knowledge, skills and attitudes in electrical principles; use electrical test equipment; and learn to service, test and store batteries.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials, AEA3415: Electrical Fundamentals, AEA3420: Current & Resistance

COURSE AEA3430: ELECTRICAL DIAGNOSTICS

Students develop knowledge, skills and attitudes in electrical principles; read schematic symbols and diagrams; and demonstrate electrical wiring and repairs.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials,

AEA3415: Electrical Fundamentals, AEA3420: Current & Resistance,

AEA3425: Batteries & Diagnostics

COURSE AEA3435: HYDRAULIC FUNDAMENTALS

Students develop knowledge, skills and attitudes around hydraulic fundamentals and their components and operation principles and repairs.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3440: HYDRAULIC SYSTEMS

Students develop knowledge, skills and attitudes around hydraulic systems and their components and operation principles and repairs.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials, AEA3435: Hydraulic Fundamentals

COURSE AEA3445: FARM EQUIPMENT 1

Students service and repair tractors, steering systems and cutting equipment. **Prerequisites**: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3450: FARM EQUIPMENT 2

Students service and repair baling equipment.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3455: FARM EQUIPMENT 3

Students service and repair tillage equipment and other types of agriculture equipment.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3460: POWER TRANSMISSION

Students service and repair clutches and drivelines.

Prerequisites: AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3465: GEARS & AXLES

Students operate, service and repair gear types, drive axles and differentials. *Prerequisites:* AEA3900: Apprenticeship Safety, AEA3400: Tools & Materials

COURSE AEA3470: AEA PRACTICUM A

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums and other experiences.

Prerequisite: None

COURSE AEA3475: AEA PRACTICUM B

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums and other experiences.

Prerequisite: None

COURSE AEA3480: AEA PRACTICUM C

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums and other experiences.

Prerequisite: None

COURSE AEA3485: AEA PRACTICUM D

Students, on the work site, continue to develop and refine those competencies developed in related Career and Technology Studies (CTS) occupational areas, previous practicums and other experiences.

Prerequisite: None

2 / CTS, TMT: AEA Course Summaries

COURSE AEA3900: APPRENTICESHIP SAFETY

Students develop knowledge, skills and attitudes in the practice of workshop health and safety, communication and career planning.

Prerequisite: None