Course Objectives: ELAP 1560, Electrical Apprenticeship 6

Program Description:
The Electrical Apprentice program (ELAP) consists of eight courses, spanning a four year (8,000 hour) working apprenticeship. The ELAP program meets classroom training requirements for Apprentice Electricians registered with the Wyoming State Fire Marshal's Office. The program (student) outcomes are as follows:

1. Utilize the National Electrical Code (NEC) for electrical design and installation
2. Interpret electrical drawings
3. Design motor control circuits
4. Apply electrical theory to practical electrical problems

Each student completes one course per semester (Fall and Spring) for four years while employed as an apprentice electrician. The program is designed to assist apprentices in obtaining the skills and knowledge needed to pass the licensing exam at the end of their apprenticeship and to be successful as licensed Journeymen.

Course Purpose:
ELAP 1560 Electrical Apprenticeship VI is the sixth in a series of eight ELAP classes. Topics include transformers, commercial electric services, motor installation calculations, motor controls and voice, data and video installations. The application of the National Electric Code (NEC) is incorporated throughout the course.

Course Outcomes:
Upon completion of ELAP 1560 Electrical Apprenticeship VI, the student will:

1. describe requirements for installation of electrical equipment for general use
2. describe the operation of transformers
3. describe the operation of AC induction motors
4. design basic motor control circuits
5. demonstrate the application of the NEC for transformers, motors, commercial services and for data, voice and video equipment

Program Outcomes *(targeted in this course)***:**

1. Utilize the National Electrical code for electrical design and installation.
2. Design motor control circuits.