

Course Objectives: ELAP 1570, Electrical Apprenticeship 7

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 1570 Electrical Apprenticeship 7 is the seventh in a series of eight ELAP classes. Topics include load calculations, health care facilities, electronics, emergency power systems, fire alarm systems, specialty transformers and advanced motor controls. The application of the National Electric Code (NEC) is incorporated throughout the course.

Course Outcomes:

Upon completion of ELAP 1570 Electrical Apprenticeship 7, the student will:

1. Perform service, feeder and branch circuit load calculations
2. Explain the operation of basic electronic devices.
3. Apply the NEC to health care facilities, fire alarm systems, emergency power systems and specialty transformer installations.
4. Draw motor control schematics.

Program Outcomes (*targeted in this course*):

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