

**Elevator (ELEVA) - New Courses added per June 2019 Addendum**

**Elevator**

**ELEVA 100 Elevator New Hire Program 4 Units**

*Hours: 72 hours LEC*

The course is intended to introduce probationary employees to National Elevator Industry Educational Program (NEIEP). NEIEP is structured to provide students with an opportunity to become acquainted with the different learning approaches available to them as students in the program. This course provides the fundamental tools required of an apprenticeship to become successful in their career as an elevator constructor.

**ELEVA 101 Elevator Trade Skills 3 Units**

*Hours: 45 hours LEC; 27 hours LAB*

This course introduces the responsibilities of an elevator apprentice. It includes the elevator apprenticeship rules and regulations, record keeping, evaluations and advancement, work ethic, safety, and basic tools. It acquaints the elevator apprentice with specifications that constitute a safe working environment under the Occupational Safety and Health Administration (OSHA); including an introduction to the rights and obligations that OSHA imposes. In addition, this course provides an orientation and overview of the history of the elevator trade.

**ELEVA 102 Elevator Hoistway Structures 3 Units**

*Hours: 45 hours LEC; 27 hours LAB*

This course reinforces the responsibilities of an elevator apprentice. It includes the elevator apprenticeship rules and regulations, and proper use of tools used in the elevator trade. This course helps the elevator apprentice understand how to build and install essential elevator hoistway, pit, and machine room structures.

**ELEVA 103 Elevator Electrical Fundamentals 4 Units**

*Hours: 72 hours LEC*

This course covers an in-depth review of mathematics needed for electrical fundamentals and the basic theory of DC electrical, AC electrical, circuits, electromagnetism, and testing equipment.

**ELEVA 104 Elevator Electrical Theory and Application 3 Units**

*Hours: 45 hours LEC; 27 hours LAB*

This course teaches theory of electrical components, applications, and real testing procedures. It provides instruction in electrical applications and electrical measurements that are required for an apprentice to be successful in their career as an elevator constructor.

**ELEVA 105 Elevator Installation 4 Units**

*Hours: 72 hours LEC*

This course takes the apprentice from a simple platform and bare hoistway to the piping, planning, and wiring of the elevator system. It also provides the information needed to install and type of door system. It finishes with an overview of preventative and scheduled maintenance.

**ELEVA 106 Elevator Solid State Electronics 4 Units**

*Hours: 72 hours LEC*

This course covers advanced electrical and solid state electronics. It emphasizes solid state components and hands-on labs to build the apprentice's electrical knowledge.

**ELEVA 107 Elevator Power and Logic 3 Units**

*Hours: 45 hours LEC; 27 hours LAB*

This course covers the fundamental circuits found in elevators control systems. It also covers basic control logic through complex logic and troubleshooting.

**ELEVA 108 Advanced Topics in Elevators 4 Units**

*Hours: 72 hours LEC*

This course covers hydraulic elevators and non-traditional types of elevators. It also covers escalators, residential, and rack and pinion systems.