



**HARGER**  
UNIVERSITY

## Virtual Course Description

Number of Participants:	Maximum 30
Number of Course Hours:	6.5
Course Description:	This course will debunk myths associated with the installation of a lightning protection system by breaking down each aspect of the system. After this course, the installer will have an understanding on the design, material, and installation requirements for an ordinary structure to be a fully compliant NFPA 780 installation.
Introduction to LP:	Definition of a lightning protection system and its four main components, relevant standards, material requirements, corrosion protection, and NRTL markings.
Ground Work:	A compliant below grade grounding system will safely and effectively disperse the lightning current into the earth. This section will explain the material and installation requirements and how they differ from NFPA 70. Additional requirements, best practices, and critical points are also discussed.
Down Conductors:	Down conductors carry the lightning current from the rooftop lightning protection system to the below grade grounding system. This section explains the function, describes material requirements, and gives insight in how to route down conductors in a standards compliant matter while maintaining an aesthetically pleasing installation. Additional requirements, best practices, and critical points are also discussed.
Bonding Requirements & Potential Equalization:	Potential Equalization (Bonding) is an important aspect of a lightning protection system that is often missed or incorrectly installed. This section will explain material and installation requirements, application of the bonding distance formulas, and integration of NFPA 70 bonding. Best practices and critical points are also discussed.
Rooftop LP:	Various types of rooftop shapes and types are investigated, placement and types of components required, coordinate with requirements with other trades, and critical points.



## Continued

**Surge Protection Devices:** Surge Protection Devices (SPD's) play a pivotal role in a compliant lightning protection system. This section breaks down the requirements, shows what is required, how it is required to be installed, and who should perform the installation. Additional requirements, best practices, and critical points are also discussed.

**Inspection & Maintenance:**

**Project Management:** Electrical installers should be already familiar with project management for general electrical projects. This section explains specific aspects of dealing with a lightning protection system and covers the bidding, submittal, installation, and certification process.

**Listing & Certification:** Typically certification of an installation is the final step before a project can be completed and closed out. This section will explain the difference between listing & certification, certification requirements, applicable fees, and the certification process.