

## **National Fire Academy Criteria for Contract Instructor Selection**

**Course: Fire Investigation: Electrical Systems (R0776)**

**Curriculum: Fire and Investigative Sciences Program**

This six-day, specialized course addresses the critical skills essential to the effective investigation and evaluation of fires involving potential electrical fire causes. Students will demonstrate current techniques, practices, protocols and standards that assist investigators in the evaluation of electrical systems and associated components.

Outdoor activities will require students to have work clothes and boots, participate in a series of practical activities that involve working with tools and electrical test equipment, and be capable of processing a fire scene (bending, kneeling, and lifting up to 50 pounds). R0776 expands upon concepts presented in “Fire Investigation: Essentials” (R0772).

### **Criteria for Contract Instructor Selection**

All new contract instructors shall be evaluated during course deliveries in accordance with the National Fire Academy’s (NFA’s) Contract Instructor Evaluation program. **Existing contract instructors are subject to evaluation in accordance with this program.**

#### **1. Academic Requirement**

##### **Investigator/Electrician**

- a. Associate degree that is from a nationally or regionally accredited institution recognized by the Department of Education. The degree should be in a field closely related to the specific course’s subject (e.g., electrical technology, engineering, fire protection technology, fire administration, fire science) or a similar program.

**OR**

- b. Documentation of completion of an electrical apprenticeship program, a journeyman or master electrician license, a four-year degree from a nationally or regionally accredited institution recognized by the Department of Education in electrical engineering, or a combination of these to reach an equivalent.

##### **Electrical Engineer**

Bachelor’s degree from a nationally or regionally accredited institution recognized by the Department of Education.

### **Electrical Technician**

- a. Current knowledge and significant experience in the field of electrical practice, installation, maintenance of electrical circuits either residential or commercial, and be an electrician, experienced tradesperson or master.
- b. Experience must be supported by documentation and should indicate sustained significant job experience in electrical systems and services.
- c. Must be able to interact with students in a positive and constructive method and understand the principles of adult education.

### **2. Instructional Requirement**

Documented successful completion of a recognized adult educational methodology/fire service instructor course at the college/university, state, or fire service academy level.

### **3. Documented Knowledge and Experience**

#### **Investigator/Electrician**

- a. Current knowledge and significant experience in the investigation of electrical fires and failure analysis demonstrated by documentation of experience or equivalent training, or a combination of both experience and training.
- b. Current knowledge in single- and three-phase industrial, commercial, and residential electrical systems, equipment and circuits.
- c. Documented ability to safely work with 120 V/240 V electrical services, equipment and testing equipment (e.g., meters).

#### **Electrical Technician**

- a. Current knowledge in single- and three-phase industrial, commercial, and residential electrical systems, equipment and circuits.
- b. Documented ability to safely work with 120 V/240 V electrical services, equipment, and testing equipment (e.g., meters).

### **4. Continuing Practice or Education**

Maintain currency in the field and the specific course by completing fire investigation continuing education units (CEUs), engineering CEUs, or other continuing education as is common in the electrical trades.

Failure to provide approved documentation of ongoing training or instruction may result in revocation of the contract instructor status.

## **5. Notice of Physical Requirements and Work Conditions (All Instructors)**

Physical requirements:

- a. Instructors must be able to lift and move up to 50 pounds to facilitate the delivery of the course during the student activities. Instructors are responsible for assisting with the placement (lifting, carrying, rolling, moving, stacking/unstacking) of furniture, furnishings, carpet, and other items in each burn cell (if needed) and preparing individual burn cells or crime scene scenarios for use by the students. Instructors may be required to use short ladders (under 16 feet), hand trucks, carts, small power tools, hand tools, and shovels and to demonstrate the use of other crime scene-processing tools and procedures.
- b. Instructors are required to participate in the student demonstrations in various capacities, including setup and presenting the demonstrations.
- c. Instructors are required to work outdoors and should be capable of working in various weather conditions, including inclement weather, during periods of rain, heat, snow and ice.

## **6. How to Submit an Application**

The following documents are required with each submission:

- a. A current curriculum vitae.
- b. A letter/email listing the courses you want to teach.
- c. Three references from persons who are knowledgeable about your character as well as your teaching ability. One reference letter should be from the department or agency head in your organization or certifying organization.
- d. Include a current email address so we can communicate more efficiently with you.

Application package(s) must be submitted to:

National Fire Academy  
[fema-nfainstructorapp@fema.dhs.gov](mailto:fema-nfainstructorapp@fema.dhs.gov)