



DETROIT FIRE DEPARTMENT
FIRE INVESTIGATION DIVISION



FORENSIC
FIRE ANALYSIS
INSTITUTE

Detroit Fire Investigation Division & Forensic Fire Analysis Institute

Advanced Fire Investigation Training

May 16-20, 2022

Location: Wayne County Community College

Downriver Campus

21000 Northline Road Taylor, MI

This course reinforces the previous week's studies allowing the investigator to gather additional hands on experience on more advanced subject matter relating to fire investigation topics and job performance requirements outlined in the current edition of NFPA 1033. Classroom lectures and in-depth hands-on practicals will be held on the following topics:

- 1. The Fire Investigators as an Expert Witness** – This class gives the participants an inside look at what is required to become an expert witness for courtroom testimony. Participants can expect to understand the importance of having requisite knowledge in subject matter as outlined in NFPA 1033 and how to articulate their qualifications in a courtroom setting.
- 2. Bias in Fire Investigations** - This course aims to improve the reliability of fire investigation conclusions by developing awareness of the how cognitive bias impacts the decision-making process; increasing recognition of situations where investigators may be more susceptible to cognitive bias; and providing the learner with reasoning techniques, physical tools, and recognized strategies that may reduce the influence of cognitive bias in their investigations.

Participants must also chose two of the following courses:

- 1. Electricity and Electrical Systems** - The class combines electrical theory with practical skills related to the analysis of 120/240- Volt electrical systems encountered in typical residential and commercial structures. Participants will be able to explain and describe how electrical systems are installed and setup for residential systems as well as demonstrate how to document and analyze electrical systems and potential failures with standard equipment and tools.
- 2. Techniques for Origin Determination** - Participants will be able to demonstrate a working knowledge of fire science, laboratory examinations, and how to apply this knowledge to assess possible ignition mechanisms and failures. The candidate's knowledge of ignition sequence concepts will be tested with a focus towards competencies of the heat source in the context of the first fuel ignited.
- 3. Fundamentals of Scene Documentation** - Topics will include photography, diagramming, and note taking. Participants will demonstrate a working knowledge of traditional and newer tools and technology in documenting a fire and explosion scene.

Registration Fee: \$750. Courses will be instructed by subject matter experts and industry professionals from the Forensic Fire Analysis Institute including: Nicole Brewer, Ryan Cox, Greg Gorbett, William Hicks, Kyle Higgins, Thomas Sing, Stuart Sklar, Bryan Winnigham, and Certified Fire and Explosion Investigator Instructors from the Detroit Fire Department.

For Michigan Law Enforcement Officers and Michigan Professional Firefighters, this course is MCOLES and MFFTC Q-Course registered.