

## Getting the Most from Thermal Imaging Equipment: Background, Operation and Its Uses

Tuesday, March 19, 2019
Holy Cross, Hogan Campus Center
1 College Street, Worcester, MA 01610
8:00 a.m. to 3:00 p.m.
(Registration/Continental Breakfast 7:45 a.m.)
Light Lunch included

The objective of this training is to understand how to use the thermal imaging equipment purchased with the 2018 MIIA Grant. Understanding some theory of how the equipment operates, what its limitations are and the types of tasks for which the equipment may be used will help your municipality get the most out of your thermal imaging equipment as one of the tools in your arsenal to help prevent damage to buildings because of water intrusion, heat loss, deterioration of infrastructure, or pest intrusion.

## COURSE DESCRIPTION

Geared to the new and relatively new infrared camera users, this custom 6.5 hour class (7 hours including lunch) focuses on thermal imager use for Building Surveyors from various municipalities.

Morning Session - Students will learn about the science of thermal imaging, including an overview of the electromagnetic spectrum, qualitative thermography, quantitative thermography, methods of heat transfer, and thermal capacities. The limitations of thermal imaging will be explained. Students will learn how to understand and better interpret images presented by a thermal imager. They will see infrared images representing typical and not-so- typical energy deficiencies, as well as examples of where the imager is out of adjustment and how the information is inaccurate. Students will learn about infrared camera specifications and how specific specifications impact the camera's effectiveness. They will learn how simple adjustments to the imager will allow them to isolate and interpret the information properly. Students will discover how to better utilize the features of their imager to acquire better images.

Afternoon Session - Different types of inspections will be covered, with an emphasis on Energy Inspections and Moisture Inspections. The students will learn about conditions that affect inspections, such as such as temperature changes, and ideal conditions needed for the most accurate results. Summer and winter issues affecting infrared inspections will be presented. Safety concerns for all inspections will be discussed. Students will participate in a hands-on session to use thermal imagers and test various camera settings.



## PRESENTER

Monroe Infrared- Monroe Infrared has been a veteran-owned small business and professional Infrared services company since 1984 with headquarters in Brunswick, Maine, and staff in several states. Monroe Infrared teaches professional IR certification training across the country to a wide array of professional, academic and trade students in multiple industries. Our instructors are extremely highly rated by students for their exceptional technical expertise and their effective, relatable teaching styles.