

## ABOUT SCHOOL

The TTC Utility Investigations School (UIS) is a one-week, graduate level course of instruction on Utility Investigations. The purpose of this school is to educate how to perform utility investigations in accordance with national standards.

Instruction will be mainly a classroom type of lecture. There will also be hands-on field work which will include demos of selected technologies. Different types of geophysical instrumentation will be on hand, on loan from manufacturers for this school.

At the end of this short course, students will receive 4 CEUs and a Certificate of Completion.

## FACULTY

Faculty will consist of recognized experts in the field of subsurface utility engineering, applied geophysics, and utility system design and operation. National Academy of Science Investigators will be on hand to discuss new tools and processes developed under several different initiatives.

## SCHOOL DIRECTOR

Jadranka Simicevic, *TTC*, [jadranka@latech.edu](mailto:jadranka@latech.edu)

## SCHOOL SPECIAL ADVISOR

Jim Anspach, *UESI*, [James.Anspach@cardno.com](mailto:James.Anspach@cardno.com)

## WHO SHOULD ATTEND

- Engineers and surveyors providing deliverables that include results and depictions of utility investigations
- Employees of utility companies, state DOTs and local highway agencies, regulatory agencies, local governments, etc.

## August 15-19, 2016

### Louisiana Tech Campus, Ruston, LA

#### SUPER-SAVER

Until May 31, 2016 \$1,345

#### EARLY BIRD

June 1 - July 15, 2016, \$1,445

#### REGULAR FEE

After July 15, 2016, \$1,559

Additional 10% discount for  
3 or more attendees from same company

#### DETAILS AND REGISTRATIONS

<http://ttcspecialtyschools.com/uis/>

#### GETTING THERE

##### Airports

Monroe (MLU) 45 min drive

Shreveport (SHV) 1 hour 15 min drive

##### Hotels

Blocks of rooms are reserved for attendees, with special rates available until 7/31/2016.

#### BECOME SPONSOR

Various sponsorship options are available. Find details at the school website.

#### CONTACT US

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## TTC

### Utility Investigations School

# UIS 2016

**August 15-19, 2016**  
**Ruston, LA**

• THEORY • PRACTICE •



Trenchless Technology Center

# TTC Utility Investigations School

## UIS 2016

The TTC Utility Investigations School (UIS) will provide students the knowledge and tools for competent utility investigations in accordance with accepted national standards.

The course covers, all in the context of ASCE-38:

- Utility System Configurations,
- Geophysics for Finding Utilities,
- Proper Records Research,
- Achieving Utility Quality Levels,
- Project Documentation, and more.

In addition to providing practical content on how to perform utility investigations in accordance with national standards, the course will also prepare the expert professional to answer the following questions during testimony:

- Have you ever received formal instruction in geophysics?  
YES
- Have you ever received formal instruction in using GPR, PCLs, Magnetics, Elastic Waves for utility detection?  
YES
- Have you ever received formal instruction in using ASCE 38 for utility investigations and mapping depictions?  
YES
- Have you ever received formal instruction in how utility systems are designed and constructed?  
YES

### WHY IS COMPLIANCE WITH ASCE-38 IMPORTANT?

With the increasing use of this standard, it is inevitable that claims and cases will arise against practitioners who portray the presence and absence of utilities on project plans.

This short course will give practitioners the knowledge and tools to defend against claims through this knowledge and its documentation.

*“ASCE has recognized that Utility Engineering is a missing task discipline from our educational curriculum. One important aspect of that discipline, Utility Risk Management for Projects, is embodied in part through the use and proper application of the ASCE 38 Standard. Yet all too often, there is no avenue to learn the principles that govern the use of this standard.*

*I am delighted that TTC and ASCE have begun this series of educational opportunities for those professionals and others under their direct responsible charge.”*

*Jim Anspach, Founding Governor of ASCE’s Utility Engineering and Surveying Institute (UESI), and Chair of ASCE-38*

### ABOUT UTILITY INVESTIGATIONS

**UNCERTAINTY.** Locations of underground utilities are uncertain once they are buried and hidden from view. This uncertainty presents risks during planning, design, construction and O&M functions. These risk are significant. The assumption that utility records are complete, accurate, and available for the use of design engineers has been proven false time and time again. This is not the fault of the utility owners. They had no reason or incentive or directive to create engineering quality records of their facilities, tied to recoverable survey control.

**EXISTING TOOLS AND TECHNOLOGIES.** Tools used to infer the existence and position of hidden underground utilities are varied, extensive, and require professional judgment. The concepts are quite like those in the medical profession while imaging what’s in your body. X-rays, ultrasounds, MRIs, Inserted cameras, and other methods are used by a variety of specialists, all under the direction of the primary physician. Even then, surgery (excavation on the human body) may be required, due to the importance of findings and its remaining uncertainties. New technologies also exist in the imaging of utilities and will be covered in the UIS.

**COMPETENT UTILITY INVESTIGATIONS.** A professional’s function is to make decisions taking into account uncertainty and risk. Underground utilities fall into this category. The ASCE produces a national standard (which principles are now incorporated throughout the world) that directs how to collect, grade and communicate the uncertainty. Studies by varied entities overwhelmingly show a very high Return on Investment for competent utility investigations at the right time during a project’s development.