



# TRAINING COURSE

AUGUST 24-28, 2020

## TESTING & TROUBLESHOOTING OF I&C SYSTEMS FOR NUCLEAR FACILITIES

### WHO SHOULD ATTEND?

The course is designed for nuclear utilities, vendors, educators, regulators, nuclear defense and cleanup facilities, isotope production plants, research reactors, fuel fabrication facilities, national and international laboratories, and universities.

### LOCATION AND DATE

The course will be held over the week of August 24 – 28, 2020, at the AMS campus located at 9119 Cross Park Drive in Knoxville, Tennessee, 37923 USA.

### HANDS-ON DEMONSTRATIONS

All course modules include hands-on demonstrations with state-of-the-art test equipment, hardware, software demonstrations, or interactive discussions.

### INSTRUCTORS

The course is conducted under the direction of AMS President, Dr. H. M. Hashemian, who will be assisted by senior AMS engineers with up to 30 years of experience in nuclear power plant instrumentation and control system testing and related topics.

### AREA ATTRACTIONS

AMS is located less than 1 hour from the beautiful Smoky Mountain National Park, the country's most visited national park. The resort city of Gatlinburg is less than an hour away and the Music City of America, Nashville, Tennessee, is only 3 hours away. The venue is very accommodating to family vacations.

### COURSE FEE

The early registration fee is \$950 if paid by July 1, 2020 and \$1,150 afterward.

### GROUP DISCOUNT

For every two registered attendees from the same organization, the third is half price, and any additional attendees will be at no additional cost.

### PAYMENT

Payment can be made with credit card, check, cash, money order, or company purchase order.

### WHERE TO STAY

There are many hotels near AMS, please visit course website for more information.

### FOR MORE INFORMATION

Please contact Kate Davy at [kate@ams-corp.com](mailto:kate@ams-corp.com) or call 865-691-1756, ext. 151.

### REGISTRATION FORM

Please click [here](#) to complete the registration form.

### COURSE WEBSITE

[www.ams-courses.com](http://www.ams-courses.com)

### EXAMPLES OF COURSE CONTENT

#### I&C Fundamentals

- Temperature Instrumentation (RTDs and Thermocouples)
- Pressure, Level, and Flow Instrumentation
- Calibration and Response Time Testing of Temperature Sensors and Pressure Transmitters

#### I&C Maintenance

- On-line Calibration Monitoring of Temperature Sensors and Pressure, Level, and Flow Transmitters
- In-situ Response Time Testing of Temperature Sensors and Pressure Transmitters
- Operating Experience from Testing Temperature Sensors and Pressure Transmitters in Nuclear Power Plants

#### EMC and Wireless Technologies

- Overview of Electromagnetic Compatibility (EMC) of Digital Equipment
- EMI/RFI Considerations for Wireless Technology Implementation
- EMC Testing and EMI/RFI Troubleshooting

#### Cable Condition Monitoring and Aging Management

- Fundamentals of Cable Testing Technologies
- Testing and Troubleshooting of Nuclear Instrumentation Systems, Rod Control, Electrical, and I&C Circuits
- Cable Insulation Aging Management and Condition Monitoring

#### Rod Control System Testing

- Rod Position Indication (RPI) System Overviews (ARPI and DRPI)
- RPI System Diagnostics, Health Monitoring, and Operating Experience
- Rod Control System Overview (CRDM and CEDM)
- Rod Control System Diagnostics, Health Monitoring, and Operating Experience

#### Special Topics

- I&C Challenges with Small Modular and Advanced Reactors
- Latest Trends in Nuclear Science and Technology
- Real World Experience with Nuclear I&C Performance