



# TRAINING COURSE

AUGUST 20-24 2018

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

### WHO SHOULD ATTEND?

The course is designed for utilities, vendors, educators, and regulators involved with nuclear power 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 20 – 24, 2018, at the AMS campus in Knoxville, Tennessee, 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 modules are taught by senior AMS engineers led by company president Dr. H.M. Hashemian. The instructors have between 10 and 30 years of experience and have worked in the nuclear industry worldwide.

### 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.

### COURSE FEE AND EARLY REGISTRATION BONUS

The first day you attend is \$500, each additional day is \$100. Register and pay by April 30, 2018 and receive a \$150 discount on your total cost.

### GROUP DISCOUNT

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

### PAYMENT

Payment can be made with credit card, check, cash, money order, or company purchase order. To receive the discount, payment must be received by April 30, 2018.

### WHERE TO STAY

There are many hotels near AMS; Country Inn & Suites is located within walking distance of the AMS campus: [www.countryinns.com/knoxville/ams](http://www.countryinns.com/knoxville/ams)

### REGISTRATION INFORMATION

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

### COURSE WEBSITE

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

### EXAMPLES OF COURSE CONTENT

#### DAY 1: I&C Fundamentals

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

#### DAY 2: Automated 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

#### DAY 3: 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

#### DAY 4: 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

#### DAY 5: Rod Control System Testing

- Rod Position Indication (RPI) Systems 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

### ANALYSIS AND MEASUREMENT SERVICES CORPORATION

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