



2019 PROTECTION TRAINING

Doble offers a wide range of protection training courses that will help prepare you for a modern grid, power plant and industrial facility. We can conduct these courses at your facilities, or at one of our training facilities.

READ FULL COURSE DESCRIPTIONS AT events.doble.com/protection

PROFESSIONAL CREDITS

Most of our protection training courses are eligible for NETA Continuing Technical Development Credits (CTDs) as well as IACET certified Continuing Education Units (CEUs). For more information visit <http://www.doble.com/earning-ceus/>

Doble Engineering Company is accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET).

COURSES

RTS ESSENTIALS TRAINING

- Two-day training on the basics of RTS and routine creation
NETA CTD credits: 16 | \$750

RTS DEVELOPER

- Two-day training on how to create and modify automated relay test routines with the FasTest system & learn RTS commands that are beyond the FasTest system
NETA CTD credits: 16 | \$1800

RTS ADVANCED DEVELOPER

- Three-day training on advanced techniques to develop advanced and custom test procedures that are tailored to specific class needs
NETA CTD credits: 24 | \$2500

2019 PROTECTION SEMINAR

- The Protection Seminar brings together protection testing topics, training and discussion forums with multiple learning tracks to best fit your needs.
Free with your Doble Protection Software License

SCHEMATIC ELECTRICAL PRINT READING

- Three-days of training on electrical print terminology, symbols, device numbers, & abbreviations, AC/DC control schematics, and power circuit breakers | \$1650

SUBSTATION MAINTENANCE

- Three-day training on the hazards and safety in a substation, concepts of switching in a high voltage yard \$1650

PROTECTIVE RELAYING APPLICATION & TESTING

- Three-day training on protective relay testing applicable for utilities, industrial plants, commercial facilities and power plants
NETA CTD credits: 24 | \$1650

BASICS OF PROTECTION FOR INDUSTRIALS

- Three-day training on protection basics as it applies to industrial plants, commercial facilities and power plants
NETA CTD credits: 24 | \$1650

BASICS OF PROTECTION FOR UTILITIES

- Three-day training on protection basics for power utilities
NETA CTD credits: 24 | \$1650

ESSENTIALS OF PROTECTION - BEGINNERS COURSE FOR TECHNICIANS

- A must for technicians who are setting out to build a career in relay testing
NETA CTD credits: 24 | \$1400

HARMONICS SIMPLIFIED

- One-day training to gain a working knowledge of harmonics, simple methods to calculate distortion levels, quick hand calculations to calculate resonant frequencies, detailed analysis using software, and a detailed procedure of designing harmonic filters
NETA CTD credits: 8 | \$800

BASIC HANDS-ON TRAINING FOR THE APPLICATION AND TESTING OF ELECTRO-MECHANICAL & MICROPROCESSOR RELAYS

- Three-day training on testing of simple overcurrent relays such as time overcurrent, under/overvoltage, and over/under frequency electromechanical relays
NETA CTD credits: 24 | \$1400

INTERMEDIATE HANDS-ON TRAINING FOR THE APPLICATION & TESTING OF ELECTRO-MECHANICAL & MICROPROCESSOR RELAY

- Three-day training on testing of distance, differential, rate of change of frequency, loss of field, reverse power and synchronizing relays
NETA CTD credits: 24 | \$1650

ADVANCED HANDS-ON TRAINING FOR THE APPLICATION AND TESTING OF ELECTRO-MECHANICAL & MICROPROCESSOR RELAY

- Three-days of advanced testing training involving communication assisted protection, analysis of event reports, COMTRADE and ss1 files, line current differential, relays, bus differential and out-of-step protection testing
NETA CTD credits: 24 | \$2000

IEC 61850 APPLICATION AND TESTING

- One and a half days of training on IEC 61850
NETA CTD credits: 12 | \$1200

FAULT CALCULATION & SYMMETRICAL COMPONENTS

- Two-day training covering fault calculations for various types of short circuit faults that can occur in a power system
NETA CTD credits: 24 | \$1200

GENERATOR PROTECTION APPLICATION & TESTING

- Two-day training on the basics of generator protection testing, including all elements that are typically used in power plant applications
NETA CTD credits: 12 | \$1200

PROTECTION TRAINING 2019 CALENDAR

JANUARY

8	9	10
Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)		
15	16	17
Essentials of Protection		
22	23	24
Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)		
RTS Essentials		
29	30	31
Schematic Electrical Print Reading		

FEBRUARY

26	27
RTS Developer	

MARCH

12	13	14
RTS Advanced Developer		
15	16	17
Application & Testing Electro-Mechanical & Microprocessor Relays (Advanced)		
20	21	22
Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)		

APRIL

2	3	4
Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)		
16	17	
RTS Essentials		
23	24	25
Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)		

MAY

7	8	9
Schematic Electrical Print Reading		
Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)		
21	22	23
Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)		
RTS Developer		

JUNE

3	4	5	6
2018 Protection Seminar			
12	13	14	
Application & Testing Electro-Mechanical & Microprocessor Relays (Advanced)			
18	19	20	
RTS Advanced Developer			
25	26	27	
Essentials of Protection - Beginner's Level for Technicians			

JULY

9	10	11
Basics of Protection for Utilities		
16	17	
RTS Essentials		

AUGUST

13	14	15
Basics of Protection for Industrials		
20	21	22
Schematic Electrical Print Reading		
27	28	
RTS Developer		

SEPTEMBER

4	5	6
Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)		
17	18	19
RTS Advanced Developer		

OCTOBER

1	2	3
Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)		
15	16	17
Application & Testing Electro-Mechanical & Microprocessor Relays (Advanced)		
22	23	
RTS Essentials		

NOVEMBER


5	6	7
Schematic Electrical Print Reading		
12	13	14
Essentials of Protection		
19	20	21
Basics of Protection for Utilities		
RTS Developer		

DECEMBER

3	4	5
Basics of Protection for Industrials		
17	18	19
Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)		

 2019 Protection Seminar Hosted in San Diego, CA USA

 Event Hosted at Training Facility in Tulsa, OK USA

 Event Hosted at Training Facility in Morrisville, NC USA

VISIT [EVENTS.DOUBLE.COM/PROTECTION](https://events.doble.com/protection) TO LEARN MORE & REGISTER

If you have 8 or more people that your company would like to send to a course, consider hosting it at your facility. Email Doble Events at events@doble.com to find out more information.