2018 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

2018 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 **2018 CALENDAR**

JANUARY

30 — 31

RTS Essentials

FEBRUARY

27 — 28

RTS Developer

MARCH

6 — 7 — 8

Substation Maintenance

13 — 14 — 15

Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)

20 — 21 — 22

RTS Advanced Developer

APRIL

17 — 18 — 19

Application & Testing Electro-Mechanical & Microprocessor Relays (Advanced)

24 — 25

RTS Essentials

MAY

8 — 9 — 10

Schematic Electrical Print Reading

Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)

22 — 23 — 24

Basics of Protection for Utilities

RTS Developer

JUNE

5 — 6 — 7

Basics of Protection for Industrials

19 — 20 — 21

Essentials of Protection - Beginners Level for Technicians

JULY

17 — 18 — 19

Application & Testing Electo-Mechanical & Microprocessor Relays (Intermediate)

31 — 1 — 2

Application & Testing Electro-Mechanical & Microprocessor Relays (Advanced)

AUGUST

7 — 8 — 9

Application & Testing Electo-Mechanical & Microprocessor Relays (Basic)

21 — 22 — 23

RTS Developer

Basics of Protection for Utilities

SEPTEMBER

5 — 6 — 7

Basics of Protection for Industrials

11 — 12 — 13

Substation Maintenance

18 — 19 — 20

Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)

RTS Advanced Developer

OCTOBER

10 — 11 — 12

Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)

23 — 24

RTS Essentials

24 — 25 — 26

Application & Testing Electro-Mechanical & Microprocessor Relays (Advanced)

NOVEMBER

6 — 7 — 8

Schematic Electrical Print Reading

Essentials of Protection - Beginners Level for Technicians

20 — 21

RTS Developer

27 — 28 — 29

Application & Testing Electro-Mechanical & Microprocessor Relays (Basic)

DECEMBER

4 — 5 — 6

Application & Testing Electro-Mechanical & Microprocessor Relays (Intermediate)

11 — 12

RTS Advanced Developer

18 — 19 — 20

Application & Testing Electro-Mechancial & Microprocessor Relays (Advanced)

Event Hosted at Training Facility in Tulsa, OK

Event Hosted at Training Facility in Morrisville, NC

VISIT 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.