The Electrical Series
Fall 2011

Electricity, Motors and Meters
September 14, 2011

Ladder Logic
October 26 & 27, 2011

Variable Frequency Drives
November 3, 2011

Motor Control Circuits
November 30, December 1 & 2, 2011

O & M of Pumps
December 14 - 16, 2011

Office of Continuing Professional Education
www.cpe.rutgers.edu
Ladder Logic

October 26 & 27, 2011  Course Code: EO711CA12
Instructor: Terry Tomsky
Registration fee: $370       Multi fee: $345
NJ licensed water operators: $185 (T, W or VSWS only)
1.2 CEUs/12 TCHs for water and wastewater license holders
Approval #01-090005-30

Instructor: Terry Tomsky
Registration fee: $485       Multi fee: $455
NJ licensed water operators: $242.50 (T, W or VSWS only)
1.8 CEUs/18 TCHs for water and wastewater license holders
Approval #01-090006-30

This course will present the theory of control operation and the proper techniques for diagramming control circuits. Once you are familiar with the basic circuit, you will be shown how to apply the same theories to more complex systems to quickly troubleshoot and repair equipment. Topics will include:

- Basic control circuit and holding circuit wiring
- Permissive circuits and light indication wiring
- Time interface circuits
- Electrical interlock interfacing circuits and timers.

PLEASE BRING YOUR VOLT/OHM METER!!

Motor Control Circuits: Wiring to Troubleshooting

Nov. 30 and Dec. 1 & 2, 2011  Course code: EO0709CA12
Instructor: Terry Tomsky
Registration fee: $485       Multi fee: $455
NJ licensed water operators: $242.50 (T, W or VSWS only)
1.8 CEUs/18 TCHs for water and wastewater license holders
Approval #01-090006-30

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Variable Frequency Drives

November 3, 2011  Instructor: Joseph Longo  Course Code: EO0706CA12
Registration fee: $270       Multi fee: $250
NJ licensed water operators: $135 (T, W or VSWS only)
0.6 CEUs/6 TCHs for water and wastewater license holders
Approval #01-090008-30

This class will introduce you to variable frequency drives (VFDs) and the reasons for their application in controlling the rotational speed of motors and other electrical equipment. While most control circuits used in industrial or commercial applications still use mechanical operating systems, the application of VFDs is increasing as a way to reduce power consumption and other operating costs. Topics will include:

- VFD theory operation and application
- Control status, monitoring and troubleshooting of VFDs
- New installations, startup/feedback controls
- Maintaining, servicing and operating VFDs.

PLEASE BRING YOUR VOLT/OHM METER!!

O & M of Pumps

December 14-16, 2011  Course Code: EO0710CA12
Instructors: Terry Tomsky and Robert Waldron
Registration fee: $485       Multi fee: $455
NJ licensed water operators: $242.50 (T, W or VSWS only)
1.8 CEUs/18 TCHs for water and wastewater license holders
Approval #01-090010-30

This is without a doubt, our most popular hands-on course! You will learn and practice accepted procedures for both daily and long term maintenance of pumps and related equipment. Proactive maintenance and a thorough understanding of the inner workings of a pump can save time and increase the efficiency of your operation. Topics will include: types and uses of pumps, terms and classifications, mechanical seals, pump head calculations and performance curves.

FIND CONVENIENT WAYS TO REGISTER

Phone: 732.932.9271, M-F 8:00 AM - 4:30 PM.
Please have your Visa, Mastercard or AMEX number ready.
Fax: 732.932.8726, 24 Hours. Please include credit card information or copy of your check, money order or purchase order with your fax.
Mail: Registration Desk, NJAES Office of Continuing Professional Education, Rutgers University, 102 Ryders Lane, New Brunswick, NJ 08901-8519. Please make check payable to: Rutgers University
Web: www.cpe.rutgers.edu

Payment Policy - All students must have prearranged for payment to be admitted to the class (purchase order, check, VISA, Mastercard, American Express or money order).
Refunds - You may withdraw from this course with a full refund (minus a $50 processing fee) provided our office is notified at least three (3) full working days prior to the start of the course. Beyond that time, registrants may be responsible for the full registration fee.
Substitutions are welcomed.