

**THE ENGINEERS' CLUB OF PHILADELPHIA**  
**(215) 985-5701**  
[www.engrclub.org](http://www.engrclub.org)

**ELECTRICAL ENGINEERING COURSES**

**FUNDAMENTALS OF INSTRUMENTATION AND CONTROL**

The cost of this eight session course is \$550. It will focus on the fundamentals of instrumentation and process control as found in industrial plants.

This course is being taught by Nathan Tadlock and will be held on **Tuesday** evenings from 6:30 PM to 8:30 PM in a classroom at The Racquet Club of Philadelphia's building located at 215 S. 16th Street, Philadelphia, PA 19102. Instrumentation for Process Measurement and Control, by Norman A. Anderson will be provided as the text.

- 03/18/08      SESSION 1**  
Course Overview including Terminology, Control Loop Fundamentals, Pneumatic and Electronic Transmission, etc.
- 03/25/08      SESSION 2**  
Flow Meters including Head Meters and Velocity Sensing Meters.
- 04/01/08      SESSION 3**  
Flow Meters including Turbine Meters, PD Meters, and Mass Flow Meters.
- 04/08/08      SESSION 4**  
Pressure Transmitters; Level Transmitters including Capacitance, Sonic, Displacer Type, etc.
- 04/15/08      SESSION 5**  
Temperature Sensors & Transmitters including RTDs & Thermocouples; Miscellaneous Auxiliary Instruments including Solenoid Valves, Process Switches, Converters & Conditioners.
- 04/22/08      SESSION 6**  
Analytical Measurements including pH, Conductivity, Gas Chromatography, etc.
- 04/29/08      SESSION 7**  
Control Valves and Actuators including Characterization and Valve Types. An Introduction to Sizing and Selection.
- 05/06/08      SESSION 8**  
Single Loop Controllers and PLCs.