



Engineers' Club of Philadelphia
Technical and Engineering Management Courses
Fall 2010

COURSE LISTINGS

	Page
Construction	
CO-1 2009 International Building Code	2
CO-2 Construction Cost Estimating	2
CO-3 Construction Project Management	2
Electrical	
EL-1 Fiber Optics and Network Wiring	2
EL-2 Advanced Fiber Optics and Network Wiring	3
EL-3 FCC License Exam Preparation	3
EL-4 Photo Voltaic Systems Installation	3
EL-5 Grounding and Bonding	3
EL-6 Changes in National Electrical Code	3
EL-7 Fundamentals of Instrumentation and Control	4
EL-8 Small Wind Turbine Installation	4
Fire Protection	
FP-1 Sprinkler Systems Basics	4
FP-2 Advanced Sprinkler Systems	4
Management	
MA-1 Project Management	5
Mechanical	
ME-1 Basic Piping Design	5
ME-2 Heating and Ventilation	5
ME-3 Air Conditioning for Designers	5
Multidisciplinary	
MU-1 Blueprint Seminar	6
MU-2 Home Inspection	6

CONSTRUCTION COURSES

[CO-1: 2009 International Building Code](#)

Course Description: This course primarily covers in depth the non-structural provisions of the "2009 International Building Code" with a structural and materials overview. This code has been adopted as the state code for Pennsylvania, New Jersey, New York, Maryland, and two counties in Delaware. The 2009 International Building Code will be the course text. (25 pdh)

Cost: Non-Member: \$600.00, Member: \$525.00

Instructor: James Rossi

Additional Course information: Students will need to bring the 2009 International Building Code to the first class.

Section CO-1a (morning course)

Class Dates: Starts Tuesday, September 14, 2010, 10 weeks (ending Tuesday, November 16, 2010), 8:30 am - 11:00 am

Section CO-1b (evening course)

Class Dates: Starts Tuesday, September 14, 2010, 10 weeks (ending Tuesday, November 16, 2010), 6:00 pm - 8:30 pm

[CO-2: Construction Cost Estimating](#)

Course Description: A comprehensive review of the methods and procedures used for estimating construction costs. (10 pdh)

Cost: Non-Member: \$300.00, Member: \$275.00

Instructor: Daniel Shovlin

Class Dates: Starts Tuesday September 21, 2010, 4 weeks (ending Tuesday, October 12, 2010), 6:00 pm – 8:30 pm

[CO-3: Construction Project Management](#)

Course Description: This Course develops a comprehensive management system for planning, scheduling, estimating costs, and financial control of construction projects. (20 pdh)

Cost: Non- Member: \$625.00, Member: \$575.00

Instructor: Ronald Kerins, Jr., C.C.M.

Class Dates: Starts Wednesday, September 29, 2010, 8 weeks (ending Wednesday, November 17, 2010), 6:00 pm – 8:30 pm

ELECTRICAL COURSES

[EL-1: Fiber Optics and Network Wiring](#)

Course Description: A hands on course on the installation, troubleshooting, and repair of small fiber optic networks. **This is an ETA-approved class and satisfies the requirements for students to take the certification test for fiber optic installers.** (24 pdh)

Cost: Non- Member: \$800.00, Member: \$725.00

Instructor: Richard Agard

Class dates: Starts Tuesday, September 7, 2010, 12 weeks (ending Tuesday, November 23, 2010), 6:30 pm - 8:30 pm

[EL-2: Advanced Fiber Optics and Network Wiring](#)

Course Description: This Hands-On course will cover the details of how fiber optic networks are designed within a complete communications systems or building structure and provide an in-depth knowledge of all aspects of a successful fiber optic system. The focus is on the design including network protocols, network configurations, optical cabling, industry communications standards, hardware selection, splicing termination methods, determination of fiber count, and cable system testing troubleshooting and documentation. **This is an ETA-approved class and satisfies the requirements for students to take the certification test for fiber optic designers.** (20 pdh)

Cost: Non-Member: \$775.00, Member: \$695.00

Instructor: Richard Agard

Class Dates: Starts Wednesday, September 15, 2010, 10 weeks, (ending Wednesday, November 17, 2010), 6:30 pm - 8:30 pm

[EL-3: FCC License Exam Preparation](#)

Course Description: This course will prepare students for taking the new FCC exam. The revisions to the FCC exam reflect many of the current changes in the commercial radio industry. This class will review the test pool, offer students strategies for taking the exam, and update students on some of the latest technology. The new exams is more pertinent and up to date for measuring and verifying the skills of the licensees. **This course satisfies the requirements for students who want to take the FCC license exam.** (20 pdh)

Cost: Non-Member: \$635.00, Member: \$570.00

Instructor: Richard Agard

Class Dates: Starts Monday, September 13, 2010, 10 weeks (ending Monday, November 15, 2010), 6:30 pm – 8:30 pm

[EL-4: Photo Voltaic Systems Installation](#)

Course Description: This course is designed to provide students with the knowledge and skills necessary to install photovoltaic systems supplying electric power to residential and commercial buildings. The course's objective is to prepare students for entry level positions working with photovoltaic systems in roles such as installers, designers, and or estimators. It will also prepare them for other entry level positions requiring basic electrical wiring skills. While the course's major focus is photovoltaic systems, basic electrical theory and the National Electrical Code, as it pertains to photovoltaic systems, will be introduced. Other areas of training include common wiring methods and the bid process. Safe working practices when working with electricity will be covered throughout this course. **This is an ETA-approved class and satisfies the requirements for students to take the test for Photovoltaic Installer Certification.** (16 pdh)

Cost: Non- Member: \$900.00, Member: \$800.00

Instructor: Richard Agard

Class Dates: Starts Thursday, September 30, 2010, 8 weeks (ending Thursday, November 18, 2010), 6:30 pm – 8:30 pm

[EL.5: Grounding and Bonding](#)

Course Description: The Electrical Grounding and Bonding one day seminar will explore the general requirement for grounding and bonding electrical installations (NEC article 250) plus concepts, principles, and theory associated with grounding and bonding such as isolated grounds, floating grounds, and ground loops. (6 pdh)

Cost: Non- Member: \$350.00, Member \$325.00

Instructor: Richard Agard

Class Dates: Tuesday, October 19, 2010 (1 session), 9:00 am – 4:00 pm

[EL-6: Changes in National Electrical Code](#)

Course Description: This one-day seminar is a review of changes in the 2008 National Electrical Code. The course will provide a general introduction on how to use the NEC book plus highlight important changes including the expansion of AFCI and GFCI requirements and revisions of grounding and bonding definitions. (6 pdh)

Cost: Non-Member: \$450.00, Member: \$395.00

Instructor: Richard Agard

Class Dates: Tuesday, October 26, 2010 (1 session), 9:00 am – 4 pm

[EL-7: Fundamentals of Instrumentation and Control](#)

Course Description: This course presents the fundamentals of instrumentation and process control as found in industrial plants. (14 pdh)

Cost: Non- Member: \$625.00, Member: \$550.00

Instructor: Mr. Nathan Tadlock

Section EL-7a (8 evenings)

Class Dates: Starts Tuesday, September 28, 2010, 8 weeks (ending Tuesday, November 16, 2010), 6:30 pm – 8:30 pm

Section EL-7b (2 days)

Class Dates: Tuesday, October 26, 2010 and Wednesday, October 27, 2010, 8:30 am – 4:30 pm

[EL-8: Small Wind Turbine Installation](#)

Course Description: This course is designed to provide students with the knowledge and skills necessary to install small wind turbines supplying power to residential and commercial buildings. Students will make wind measurements, perform site analysis, test and compare a variety of turbine configurations, raise a small tower and install a 450 Watt wind turbine. While the courses major focus is small wind technology, basic electrical theory and the National Electrical Code as it pertains to small wind systems will be included. Other areas of training include common wiring methods, rigging and the bid process. Safe working practices when working with electricity will be covered through out the course. This is an ETA-approved class and satisfies the requirements for students to take the test for the Small Wind Installer Certification. (14 pdh)

Cost: Non-Member: \$725.00, Member: \$650.00

Instructor: Mr. Richard Agard

Section EL-8a (8 evenings)

Class Dates: Starts Tuesday, September 28, 2010, 6 weeks (ending Tuesday, November 2, 2010), 6:00 pm – 8:30 pm

Section EL-8b (2 days)

Class Dates: Tuesday, October 12, 2010 and Wednesday, October 13, 2010, 9:00 am – 5:00 pm

FIRE PROTECTION COURSES

[FP-1: Sprinkler Systems Basics](#)

Course Description: Detailed review of the NFPA standards for commercial and residential sprinklers, fire pumps, standpipes, water supplies, and underground systems. (20 pdh)

Cost: Non-Member: \$725.00, Member: \$650.00

Instructor: Philip L. Gaughan, SET

Class Dates: Starts Thursday, September 16, 2010, 10 weeks (ending Thursday, November 18, 2010), 7:00 pm - 9:00 pm

[FP- 2: Advanced Sprinkler Systems](#)

Course Description: Detailed review of the NFPA standards for commercial and residential sprinklers, fire pumps, standpipes, water supplies, and underground systems. (25 pdh)

Cost: Non-Member: \$725.00, Member: \$650.00

Instructor: Michael Venneri, PE, SET, CFPS

Class Dates: Starts Wednesday, September 22, 2010, 10 weeks (ending Wednesday, November 24, 2010), 6:00 pm - 8:30 pm

MANAGEMENT COURSES

[MA-1: Project Management](#)

Course Description: Projects have traditionally been the basic unit of work for many engineering organizations—consulting, design, and construction firms. Other types of engineering organizations—government agencies, utilities, manufacturing—are using projects more and more as a way to tackle problems, make improvements, or bring new products and services to market more quickly and cost-effectively. This two-day course involves you in a project leadership model that you can take back to your workplace and apply immediately. (14 pdh)

Cost: Non- Member: \$995.00, Member: \$895.00

Instructor: Ann Tomalavage PE, PMP, M.ASCE

Class Dates: Saturday, October 23, 2010 and Saturday, October 30, 2010 (2 days), 8:30 am – 5:00 pm

MECHANICAL COURSES

[ME-1: Basic Piping Design](#)

Course Description: Basic Theory and application of fluid mechanics and piping design found in boilers, air conditioning, refineries, nuclear and fossil fuel power plants, chemical processing, metallurgical industries and drainage systems. (20 pdh)

Cost: Non-Member: \$585.00, Member: \$525.00

Instructor: Gregory Wilhelm, PE

Section ME-1a (10 weekday evenings)

Class Dates: Start Thursday, September 16, 2010, 10 weeks (ending Thursday, November 18, 2010), 6:00 pm - 8:30 pm

Section ME-1b (1 week, 5 days)

Class Dates: Monday, October 25, 2010 through Friday, October 29, 2010 (5 days), 8:30 am – 12:30 pm

[ME -2: Heating and Ventilation](#)

Course Description: Covers building heating codes, heat loss calculations, heating and ventilation systems design, and equipment selection. (20 pdh)

Cost: Non-Member: \$700.00, Member: \$625.00

Instructor: Dan Beggarly

Class Dates: Wednesday, September 14, 2010, 10 weeks (ending Wednesday, November 16, 2010), 7:00 pm - 9:00 pm

[ME-3: Air Conditioning for Designers](#)

Course Description: Covers building cooling codes, heat gain calculations, cooling and air conditioning systems design, and equipment selection. **Successful completion of Engineers Club Heating and Ventilation Course is a prerequisite.** (20 pdh)

Cost: Non-Member: \$585.00, Member: \$525.00

Instructor: Dan Beggarly

Class Dates: Starts Tuesday, September 16, 2010, 10 weeks (ending Tuesday, November 18, 2010), 7:00 pm - 9:00 pm

MULTIDISCIPLINARY COURSES

[MU-1. Blueprint Seminar](#)

Course Description: This course is intended to provide the student with a basic working knowledge of blueprint/building trades' blueprint reading. The course emphasizes the importance of being neat, thorough, efficient, and organized when working with drawings. The course is an abbreviated version of a longer class. The coursework is also geared to give the student sufficient background to continue the study of the construction and construction management processes in subsequent Engineers Club class offerings. (12 pdh)

Cost: Non-Member: \$300.00 Member: \$270.00

Instructor: Christopher Menna, PE

Class Dates: Saturday, September 25, 2010 **and** Saturday, October 2, 2010 (2 days) 8:30 am – 4:00 pm

[MU-2: Home and Building Inspection](#)

Course Description: This course provides a scientific approach for conducting inspections of the basic components and systems of a property. It will enable the student to perform meaningful evaluations of the structural, mechanical, and electrical systems. The course is designed for both technical and non technical individuals and will emphasize the statistical design lives of building components, recognition of design and construction flaws, hazards, economic return on retrofits and conservation. An inspection field trip will be arranged to provide students with practical applications of the course material. (20 pdh)

Cost: Non-Member:\$550.00, Member:\$500.00

Instructor: Dan Banks, PE

Class Dates: Monday, September 13, 2010,10 weeks,(ending Monday, November 15, 2010) 6:00 pm – 8:00 pm

GENERAL INFORMATION AND REGISTRATION

Most courses will be held at the Engineers' Club of Philadelphia, located in the Racquet Club at 215 South 16th Street, Suite 16, Philadelphia, PA 19102. Other locations may be selected to accommodate a firm's on-site program or for the convenience of the students and/or faculty. The Racquet Club is not handicapped-accessible; if a student needs such accommodation, please notify us upon registration and we will arrange for a handicapped-accessible location.

Tuition for courses generally includes texts and reference materials, unless noted otherwise. Tuition does not cover meals for all day courses.

Registration for each course will close one week before the first session. Courses will be cancelled if there are insufficient registrations (and all fees refunded).

Some of the courses may be eligible for professional development hours (pdh). It is the participant's responsibility to determine whether the course complies with the requirements of the registration or certifying agency. A certificate of completion will be provided to those completing the course.

Engineers' Club dues-paying members receive a discount on tuition, as noted in the course information.

The Engineers' Club does not discriminate in offering its educational courses.

Additional course and registration information, including a pdf file of this catalog, is located on the website (www.engrclub.org, click Professional Development) or contact Susan Best (sbest@engrclub.org or (215) 985-5701).

Registration can be made online, by emailing reservations@engrclub.org, mailing the form below, or by calling (215) 985-5703. Clicking the course title in this pdf will direct you to the online store for that course.

Payment is due at time of registration. Payment will be refunded if student withdraws from the class not less than seven days prior to the start of the course.

REGISTRATION

Name: _____
Company: _____
Address: _____
City, State, Zip: _____
Telephone _____ **Email** _____

Please register me in the following course(s):

Course Number and Title	Starting date	Tuition
TOTAL PAYMENT		

Print your name, as it should appear on the Certificate of Course Completion: _____
 Are you a member of the Club? : Yes _____ No _____

<p>Ways to Register:</p> <ul style="list-style-type: none"> • Online at http://www.engrclub.org (click Professional Development) • Mail this form to the Engineers' Club of Philadelphia at the address below: <ul style="list-style-type: none"> ○ Check enclosed made payable to: "The Engineers' Club of Philadelphia" ○ Pay by credit card • Call 215-985-5703 and pay by credit card • Email this form to reservations@engrclub.org with credit card information
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<p>If paying by credit card:</p> <p>Credit Card type _____ Exp Date _____ Number _____ CVV Number _____ Name on Card _____ Billing Address (if different from registration address) _____ _____</p>
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