

**EE-1**  
**Electrical Engineering PE Refresher**  
**Thursdays, August 19 – October 21, 2010**  
**Amundson Hall 162, 6:10-9:00 PM**  
**Class Web Site: [www.ece.umn.edu/class/ee0001](http://www.ece.umn.edu/class/ee0001)**

WEEK	DATE	TOPIC	INSTRUCTOR
1	08/19/2010	Introduction & Fundamentals	Dan
2	08/26/2010	Introduction & Fundamentals	Dan
3	09/02/2010	Power System Review, Complex Math	Tom
4	09/09/2010	Per-Unit Systems, Transformers – Models, Impedance & Connections	Tom
5	09/16/2010	Transformer Nameplates, Induction Machines	Tom
6	09/23/2010	Energy Measurement	Dan
7	09/30/2010	Synchronous Machines, VAR Compensation	Tom
8	10/07/2010	Transmission Lines, Symmetrical Components	Tom
9	10/14/2010	Symmetrical Components, Short Circuit Analysis	Tom
10	10/21/2010	Finance & Wrap-up	Dan & Tom

**Board of Architecture, Engineering, Land Surveying, Landscape Architecture,  
Geoscience & Interior Design**  
85 E 7th Place Suite 160  
St. Paul 55101  
Phone: (651) 296-2388  
Key person: Jordan Daoust  
Phone: 651-757-1519  
Email: [jordan.daoust@state.mn.us](mailto:jordan.daoust@state.mn.us)  
Web site: <http://www.aelslagid.state.mn.us>

Future PE Exam dates are:

PE Examination      MN Board Deadline    ELSES Registration Deadline

October 29, 2010	August 16, 2010	September 12, 2010
<b>Year</b>	<b>Spring Date</b>	<b>Fall Date</b>
2010	April 16	October 29
2011	April 8	October 28
2012	April 13	October 26
2013	April 12	October 25



- 7) **Electrical Transmission and Distribution Reference Book** published by ABB Power T&D Company, Inc, Transmission Technology Institute, Centennial Campus, 1021 Main Campus Drive, Raleigh, North Carolina 27606; (919) 515-6000, (919) 515-6043(FAX); \$125.00.
- 8) **Electronics Designers' Handbook** (Giacoletto) published by McGraw-Hill
- 9) **Handbook of Chemistry and Physics** published by Chemical Rubber Co., 18901 Cranwood Parkway, Cleveland, Ohio 44128
- 10) **2008 National Electrical Code** published by National Fire Protection Association, Batterymarch Park, Quincy, Mass 02269, available from Minnesota Electrical Association, 3100 Humboldt Ave S., Mpls 55408, phone 827-6117
- 11) **Radio Amateur's Handbook** published by American Radio Relay League, Newington, Conn.
- 12) **Reference Data for Radio Engineers** (ITT) published by Howard W. Sams & Co, Inc., Indianapolis, Indiana 46268
- 13) **Standard Handbook for Electrical Engineers** (Fink) published by McGraw-Hill
- 14) **Standard Mathematical Tables** published by Chemical Rubber Co., 18901 Cranwood Parkway, Cleveland, Ohio 44128
- 15) **Pocket Ref** by Thomas J. Glover, published by Sequoia Publishing, P.O. Box 620820 Dept 101, Littleton, Colorado 80162-0820. www.sequoiapub.com, ISBN 1-885071-00-0
- 16) **Pocket PCRef** by Thomas J. Glover and Millie M. Young, published by Sequoia Publishing

Note: The Radio Amateur Handbook and the two Pocket reference documents (#8, 12, 13) are available locally from Radio City, 2663 County Road I, Mounds View, MN 55112, phone (612) 786-4475, (800) 426-2891, www.radioinc.com

Additional aids include compass and triangle, scientific calculator, and basic college texts.

Format of the course will be a combination of lecture and group and individual problem solving. The student should identify and bring with him to class reference materials which he will find useful in taking the professional engineering exam.

Topics which will be covered during the ten class sessions will include the following:

- Nature and presentation of the PE exam
- Basic Circuits
- Transformers, power systems, National Electrical Code
- Machinery
- Control Theory
- Electronics
- Logic design
- Communications

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Please complete the following:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone:

Office: \_\_\_\_\_

Home: \_\_\_\_\_

FAX: \_\_\_\_\_

E-MAIL: \_\_\_\_\_

Additional information to help us get to know you better:

Year graduated:

Degree earned:

Institution:

Major specialty of interest:

When do you plan to take the PE exam?

Where do you work?

What type of work do you do there?

Why are you seeking professional registration?