



# SIEMENS

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## PSSC 500

### PSS®E Power Flow and Steady State Analysis

Siemens Power Academy TD - NA • [usa.siemens.com/pti-education](https://usa.siemens.com/pti-education)

#### At a glance

The **PSS®E Power Flow and Steady State Analysis** course is designed to familiarize new users with the Power Flow and Fault Analysis features of the PSS®E program. Participants gain experience through hands-on exercises.

In **PSSC 500** participants will gain practical experience in:

- Modeling a basic power flow
- Solving power flows and creating reports
- Understanding and interpreting results (convergence, divergence, non-convergence)
- Changing model data and network topology
- Applying data checking functions to identify modeling issues
- Managing power flow data (import/export, network reduction, merging data)

- Performing fault analysis, including overhead line properties calculation and data management
- Automating and customizing procedures using Response Files, IPLAN\* and Python®\*
- Performing balanced switching, motor starting and voltage rise calculations and viewing results
- Performing AC/DC contingency and transfer limit calculations
- Special applications, including PV/QV analyses and Inertial/Governor redispatch power flows.

\* *This course provides a brief introduction to the use of IPLAN and Python in PSS®E. Siemens Power Academy offers separate comprehensive courses in IPLAN programming and the Python language.*

Upon completion of this course, new PSS®E users will be acquainted with most program functions in sufficient detail for them to begin study work relevant to power flow, fault analysis and other types of steady state analysis.

#### Prerequisites

Participants must be employees of a company that is a current lessee of PSS®E. While no experience with the program is required, it is assumed that participants are familiar with electric network modeling fundamentals, symmetrical component theory of poly-phase systems, and power system analysis methods.

#### Course structure

This is a four-and-one-half day course. Material is presented in both morning and afternoon sessions for a total of six hours of daily instruction. Standard course hours are 9:00 a.m. to 4:00 p.m. each day, except the last day, which concludes at noon.

**To view the PSSC 500 Course Schedule on the web:**

[https://siemens.coursewebs.com/cart/pageCourseInfo.aspx?Course\\_ID=PSSC\\_500](https://siemens.coursewebs.com/cart/pageCourseInfo.aspx?Course_ID=PSSC_500)

## Instructors

All courses offered through Siemens Power Academy are developed and taught by leading industry engineers. In addition to their proven instructional ability, our engineers have advanced degrees complemented by first-hand knowledge and experience solving power system problems throughout the world.

## Continuing Education Units (CEUs), Professional Development Hours (PDHs):

Licensed engineers, on a voluntary or mandated basis, attend continuing professional education for licensure renewal to ensure competency. All courses offered through Siemens

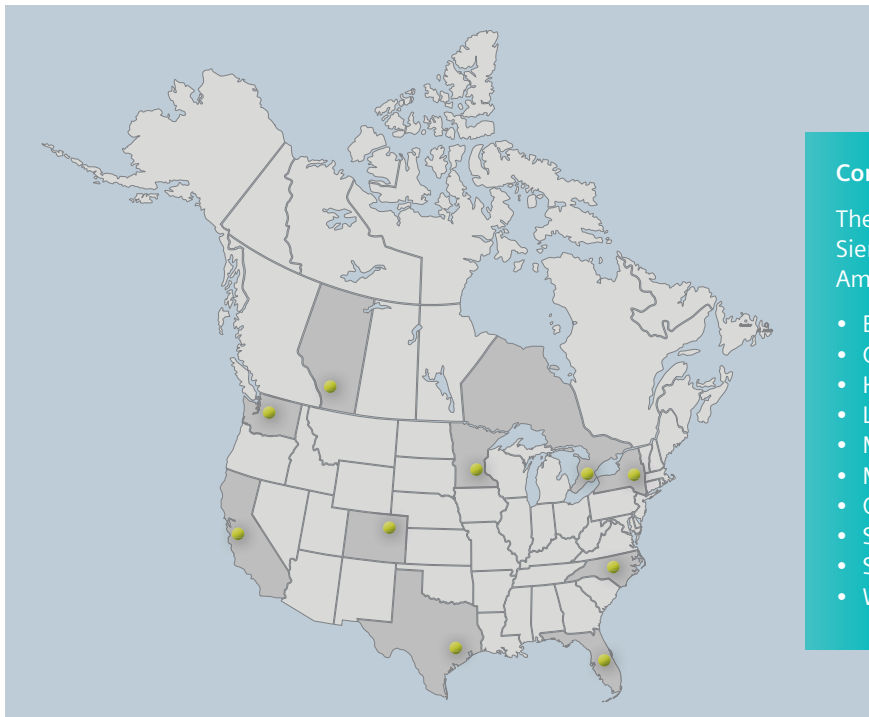
Power Academy meet the requirements for CEUs and PDHs.

- Continuing Education Units (CEUs) are the nationally recognized units for recording participation in professional development and noncredit educational programs. Participants completing this course will be awarded CEUs based on the instructional hours of the course: one CEU is awarded for 10 classroom hours of instruction.
- Professional Development Hours (PDHs) – Continuing education training for the Professional Engineer (PE) – that needs to earn annual Professional Development Hours

(PDHs). Through our instructor-led training, participants earn one PDH for each one hour of instruction. The participant is responsible for maintaining records of courses taken in support of licensure.

## Client site and custom training

All courses are available for presentation at any client's location by special arrangement. At client sites, it is recommended that sufficient computer terminals be available to enable a fully interactive and productive class, if applicable. Client site courses can also be tailored to address specific topics of local importance.



## Convenient training locations

The course is scheduled on a regular basis at Siemens offices located throughout North America, including:

- Burlington, Ontario, Canada
- Calgary, Alberta, Canada
- Houston, Texas, USA
- Littleton, Colorado, USA
- Minnetonka, Minnesota, USA
- Mountain View, California, USA
- Orlando, Florida, USA
- Schenectady, New York, USA
- Seattle, Washington, USA
- Wendell, North Carolina, USA

## Contact us

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Export Control

AL-Number:

ECCN: EAR99

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