



SIEMENS

Ingenuity for life



PSSC 500 Online

PSS®E Power Flow and Steady State Analysis

Siemens Power Academy TD - NA • 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 redispach 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

To make it easier to accommodate today's busy schedules, we converted the course delivery to 2.5 hr. daily afternoon online sessions (1:00 PM – 3:30 PM EST) over a 2 week period.

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

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 and custom training

All online courses are available to a client and their staff by special arrangement. It is recommended that each participant has the PSS®E software loaded on their computer prior to the online course delivery. We will supply temporary licenses to those who do not have permanent licenses for the duration of the online course. Client online courses can also be tailored to address specific topics of local importance.

Contact us

Siemens Power Academy TD - NA

Phone: (518) 395-5005

Fax: (518) 346-2777

Email: power-academy.us@siemens.com

Web: usa.siemens.com/pti-education

Export Control

AL-Number:

ECCN: EAR99

Siemens Industry, Inc.

Siemens Power Technologies International
400 State Street
P.O. Box 1058
Schenectady, NY 12301-1058 USA

© 2020 Siemens Industry, Inc.

usa.siemens.com/digitalgrid