

Siemens Power Academy TD

# PSS®E and Python™ Integrating Workflow (Part 2 – Advanced)

PSSC 650

## At a glance

In the **PSS®E and Python™ Integrating Workflow (Part 2 – Advanced)** course participants will learn advanced capabilities of the Python language, and learn to apply these to create powerful Python programs to automate PSS®E.

**PSSC 650** course participants will:

- Become familiar with object-oriented Python: objects, classes, inheritance, and polymorphism
- Learn other advanced features of Python, such as decorators, iterators, and generators
- Learn to build custom user interfaces using wxPython
- Fully integrate their PSS®E programs with Microsoft® Excel, Word, and Access
- Interface with a Microsoft® SQL Server database with Python
- Learn how to use scientific Python libraries to perform linear algebra and numerical analysis on PSS®E data
- Learn advanced post-processing of PSS®E powerflow, contingency analysis, and dynamic analysis
- Use Python to build substations and interact with node-breaker topology in PSS®E.

Upon completing this course, the participant will have the tools needed to write advanced programs in Python to drive PSS®E and process the output.

## Prerequisites

Participants must be employees of a company that is a current lessee of PSS®E. It is highly recommended that participants attend the first course in the series, PSS®E and Python™ Integrating Workflow (Part 1 – Intro), before attending this advanced course. Participants should be comfortable with the Python language essentials and should be experienced users of PSS®E.

## Course structure

This is a two-day course. Material is presented in both morning and afternoon sessions for a total of six hours of instruction each day. Standard course hours are 9:00 a.m. to 4:00 p.m. each day

**To view the PSSC 650 Course Schedule on the web:**

[https://siemens.coursewebs.com/siemens/pageCourseInfo.aspx?Course\\_ID=PSSC\\_650](https://siemens.coursewebs.com/siemens/pageCourseInfo.aspx?Course_ID=PSSC_650)

### 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):

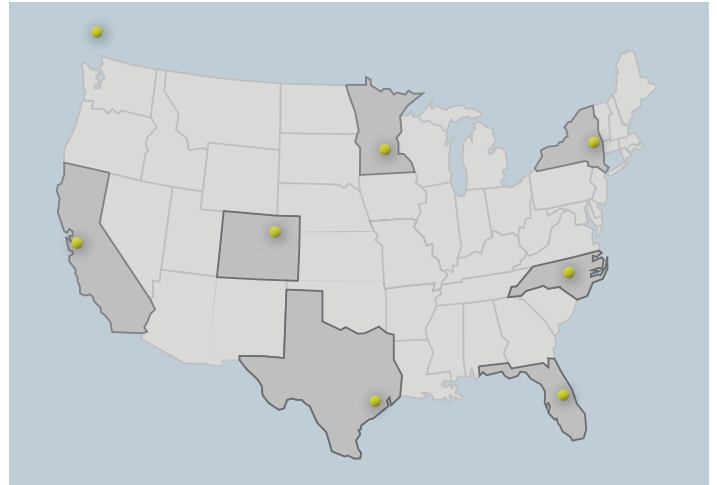
Licensed engineers, on a voluntary or mandated basis, attend continuing professional education for licensure renewal to ensure competency. All courses offered through Siemens Power Academy meet the requirements for CEUs and PDHs.

- 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.

### Convenient training locations

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

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



### 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.

### Contact us

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