



## Power Plant Operations - SIM-PPO

### COURSE

#### About the Course

This interactive 2-day course combines elements of high fidelity, generic process simulators as well as a student-driven learning model centered around the INSTO™ Methodology. PetroSkills Simulation Solutions 2-Day Courses teach operators how to build a mental model of various processes and stress critical thinking skills for operators that can be brought back to the control room.

In this course each trainee will have access to their own generic simulators including a Steam Boiler, Natural Gas Turbine, and Basic Combined Cycle Power Plant. Trainees will have an opportunity to startup each piece of equipment as well as spend time troubleshooting common malfunctions related to boilers, turbines and combined cycles. Operations that promote both safety as well as optimization are stressed throughout the course. The material of the course is applicable to chemical sites, petrochemical sites, and any other facilities that operate boilers, turbines and combined cycles.

#### Target Audience

Console Operators, Outside Operators, Console Supervisors, and Young Engineers that work with boilers, turbines and combined cycles

#### You Will Learn

##### STEAM BOILER

- Improving knowledge of fundamental engineering and operating principles
- Understanding of basic unit operations
- Increasing operator confidence levels
- Improving basic operational skills

##### NATURAL GAS TURBINE

- Operate the Natural Gas Turbine as an Outside Operator
- Operate the Natural Gas Turbine as a Console Operator
- Improving knowledge of fundamental engineering and operating principles
- Understanding of basic unit operations
- Increased operator confidence levels
- Improved basic operational skills

## BASIC COMBINED CYCLE POWER PLANT

Proper use of the simulator will provide the operator with:

- 1) A better knowledge of unit operations
- 2) Proper operating techniques
- 3) The ability to diagnose malfunctions
- 4) The correct procedures for handling changes in operations
- 5) An awareness of safety procedures
- 6) Methods to avoid causing problems

## Course Content

Startup, troubleshooting, safety operations, and optimization operations through simulators for:

- Steam boiler
- Natural gas turbine
- Basic combined cycle power plant

## Product Details

Categories: [Upstream](#)

Disciplines: [Operations & Maintenance](#) [Refining](#)

Levels: [Foundation](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#)

Instructors: [Donald Glaser](#)