

# POWER GENERATION (PGEN)

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## **PGEN F101 Introduction to Power Generation, Distribution and Alternative Energy**

3 Credits

Offered As Demand Warrants

Designed for those interested in gaining knowledge of the modern methods of commercial power generation and its distribution. Provides an overview of current trends toward the development of stable, sustainable, alternative energy, production method(s) and terminology/ concepts relative to modern industrial power generation.

**Recommended:** WRTG F111X; any F100-level MATH.

**Lecture + Lab + Other:** 3 + 0 + 0

## **PGEN F102 Basic Electricity for Power Generation Operators**

4 Credits

Offered As Demand Warrants

Introduction to basic electrical theory and to hands-on training for basic electricity. Introduction to basic electrical equipment, systems, and instrumentation utilized in the production and control of commercial electrical power generation.

**Recommended:** WRTG F111X; any F100-level MATH.

**Lecture + Lab + Other:** 3 + 2 + 0

## **PGEN F103 Introduction to Power Generation: Maintenance**

4 Credits

Offered As Demand Warrants

Designed for those interested in advancing their knowledge of maintenance relative to the commercial power industry. Provides overview of power generation equipment and the routine maintenance required to keep the equipment. Also provides an overview of safe working practices, tools, procedures, drawings, Piping and Instrumentation (P&IDs) and Process Safety Management (PSM).

**Prerequisites:** PGEN F101; PGEN F102.

**Recommended:** Computation course.

**Lecture + Lab + Other:** 3 + 2 + 0

## **PGEN F104 Gas and Steam Turbines: Cogeneration and Combined Cycle Technologies**

4 Credits

Offered As Demand Warrants

Introduces basic information associated with modern gas and steam turbines, and the systems in which they are used to produce electrical power and/or steam for heating.

**Prerequisites:** PGEN F101; PGEN F102; PGEN F103.

**Recommended:** Computation course.

**Lecture + Lab + Other:** 4 + 0 + 0