Power Plant Operator

High School Course Match-up

English/Language Arts I, II, III, IV

All utility jobs require being able to communicate with others through words and writing. This can be gained by taking four years of English/Language Arts in high school. As a Power Plant Operator, you’ll need to be able to follow step-by-step directions to operate electricity generating machinery. You’ll also need to read data and be able to write reports. This will require you to have practiced writing and using correct spelling, grammar, and punctuation in high school. Being able to talk to your boss and co-workers is also a key in succeeding as a Power Plant Operator.

Algebra I and II

Believe it or not, what you learn in Algebra is going to help you as a Power Plant Operator. Those theorems you do in class are similar to the problem-solving process you’ll go through to identify and solve power problems in a power plant. Both ask you to think about, “if this is true, then….” So keep up the good work and tell your algebra teacher that what he or is teaching you will actually help you become a better thinker! You may want to choose to take Algebra II given the importance of problem solving for Power Plant Operators.

Geometry

Power Plant Operators need to have a foundation of geometry. This will enable them to grasp the advanced concepts in trigonometry, which are essential in power plant operation.

Trigonometry

Trigonometry probably sounds more complicated than it is. Trigonometry is the math of right angles and circles. Any time you want to figure out anything to do with angles, turning, or swinging, there's trigonometry involved. Power Plant Operators are responsible for adjusting controls as power use changes, which will be interpreted by looking at waves and spikes, both trigonometric concepts. So keep your chin up and jump into trig knowing it is going to make you a better Power Plant Operator!

Earth or Environmental Science

Since energy comes from natural resources, it is a good idea to take earth or environmental science to prepare you for a job in the energy industry. Earth science will introduce you to the various types of natural resources that are used to generate electricity including coal, natural gas, and nuclear power. Environmental science will help you
control hazards and hazardous materials, understand how these materials impact the environment, and understand how to protect yourself and the environment.

**Biology and Chemistry**

These courses are typically required in high school and will provide you with a well-rounded science background.

**Physics**

Physics will be a very important course for you to take in high school in entering the energy field. You’ll learn things such how electricity is generated, moves, is stepped down and distributed to consumers. To truly understand the inner workings of a power plant, you’ll need to understand concepts in physics such as electrons and protons.

**State History-Civics/U.S. History/World History**

While history doesn’t sound like something that important to work for a utility, it will help you better understand people. You will be employed in a diverse workplace, with individuals from other towns, states, and even from other countries. The better you understand the experience of others and how they got to where they are today, the better equipped you will be in the “life” skills required at any job. In addition, there are laws and regulations that utilities must follow, so knowing how our government makes rules will help you as well. So, being a history buff isn’t so bad!