

# Technicians

## 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 Maintenance & Repair Worker, you'll need to consult manuals and be able to follow the directions carefully. You'll also need to keep logs of your daily work, write reports, and fill out work orders. 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 key in succeeding as a Maintenance & Repair Worker.

### Algebra I and II

Believe it or not, what you learn in Algebra is going to help you as a Maintenance & Repair Worker. Those theorems you do in class are similar to the problem-solving process you'll go through in trying to figure out what needs to be fixed on machines, mechanical equipment, and buildings. 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 Maintenance & Repair Workers.

### Geometry

Part of being a Maintenance & Repair Worker may include installing new wiring, electrical components, piping and plumbing, machinery and equipment. Haven't taken Geometry will help you in these areas since they require measuring and understanding dimensions and spaces. You'll also need this experience for taking apart and repairing machines as well as for using special measuring instruments.

### 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. These are all part of doing repairs. So keep your chin up and jump into trig knowing it is going to make you a better Maintenance & Repair Worker!

### 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. In addition, you'll find out about the types of things you'll run into when you

do any digging or trenching on the job. 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. In addition, you will learn basic concepts of physics when working with building and repair materials.

### **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!