

## Environmental Engineer: Putting STEM to Work<sup>®</sup>

Environmental engineers develop techniques to recover usable materials and reduce waste created during manufacture of a product, including energy. Environmental engineers also design air pollution control for power companies and may also be responsible for monitoring systems in a facility for compliance with environmental regulations.

### What will you do?

#### ENTRY LEVEL

- Responsible for performing entry-level engineering analysis
- Design, plan, review, and inspection for small to medium projects or designated segments of larger, more complex projects
- Application of professional engineering concepts, principles, practices, and methods to perform a broad range of engineering activities in a variety of work environments
- Work under guidance of an experienced engineer
- Initial work is reviewed for technical soundness, appropriateness, and compliance with standard engineering practices

#### 3+ YEARS

- Responsible for and/or lead others in performing engineering analysis
- Design, plan, review, and inspection for moderately complex/major projects
- Application of advanced engineering concepts, principles, practices, and methods to perform a broad range of engineering activities in a variety of work environments
- Resolve new and unusual problems and recommend solutions to unique circumstances and situations
- Regular contact with individuals in internal and external leadership positions to influence and motivate others to achieve project objectives

#### 5-10+ YEARS

- Serve as team leader in performing engineering analysis
- Design, plan, review, and inspection for complex projects among varying disciplines
- Manage multiple projects at one time

### What competencies do you need?

- *Critical thinking*
- *Problem solving*
- *Print reading*
- *Project planning*
- *Teamwork*
- *Knowledge and application of new technologies*
- *Knowledge of legislative and regulatory functions and industry standards*

- *Critical thinking*
- *Problem solving*
- *Project planning*
- *Troubleshooting*
- *Teamwork*
- *Communication skills*
- *New project design*
- *Development of short- and long-term plans*

- *Critical thinking*
- *Problem solving*
- *Project planning*
- *Teamwork*
- *Communication skills*
- *Supervisory skills*
- *Leadership skills*