



#### STUDENT ACTIVATION



## Engineering Project Manager

### **OVERVIEW**

Engineering project managers help take large vessels from idea to reality. They are responsible for managing an entire engineering process and ensuring the work is done correctly, according to a prescribed timeline, and within a specified budget. They are changemakers with the vision to see what something has the potential to be and the skills and expertise to make it so. If you are organized, detailed, thrive when working as a part of the team, and have the leadership skills to inspire others to follow you, you might make an excellent project manager.

#### **EVALUATE YOUR INTEREST**

- □ I enjoy leading, and others seem comfortable following me.
- □ I like working as part of a team.
- □ I can clearly communicate directions and expectations to help others meet goals.
- □ I am able to look at several disparate pieces and envision how they can all come together to form something new.
- □ I am detail-oriented.
- $\hfill\square$  I work best with organization and order.
- □ I like creating and following a step-by-step process to accomplish a goal.
- □ I enjoy STEM subjects like physics, computer science, algebra, and calculus.
- □ I am interested in the consumer shipping industry or our country's naval system.



# Engineering Project Manager

STUDENT ACTIVATION (CONTINUED)



### **CAREER CONNECTION**

## How does this career affect me?

Have you ever wondered how your new cell phone got from one side of the world to the other? If you order a product online, there's a good chance it makes it to your doorstep thanks, in part, to the worldwide shipping industry. Items including food, clothes, electronics, and the materials needed to create them travel from one place to the next on huge ships, and these vessels are built by teams that include shipbuilding project managers. Shipping is in many ways the unsung hero of our global economy, and ships could not play the role they do without shipbuilding project managers.

### What are some other similar careers?

**Construction project managers** take a construction project from inception to completion. Like shipbuilding project managers, they may find career opportunities in both private industry and the government. They specialize in construction equipment and tools but follow similar processes and need to have similar skills to shipbuilding project managers.

#### Information technology (IT) project

**managers** are concerned with the workflow of IT infrastructure, information systems, or computers. They work in a wide variety of industries and may specialize in many different types of IT, including database management, mobile applications, network configuration, and IT security systems. They supervise the development of these products or systems from start to finish.

**Operations managers** ensure that a company or a team is running efficiently and effectively. Individuals with the technical skills of a project manager might enjoy managing the whole company's operations. They must be critical thinkers and problem solve to find solutions and systems that are best for the company. They may set guidelines and even develop an organizational structure that helps all the teams under their management find success.

### How does this career affect the world?

The U.S. Navy is the maritime branch of the U.S. armed services and is charged with defending this country from the sea. The Navy is both a symbol and a key driver of America's standing in the world. The state-of-the-art vessels that the U.S. Navy relies on are made by highly specialized individuals, including shipbuilding project managers. These teams work as one to build world-class ships, and each aspect of the production is led by skilled project managers. The impact that these Navy shipbuilding teams have on the world can hardly be overstated.







### **TAKE ACTION**

- Identify all the chores that you need to complete in a given week. Decide how much time you have to dedicate to chores that week and make a plan for when you'll tackle each chore, including an estimate of the time it will take to complete each chore well. Make notes of any ways that you can be more efficient, meaning ways that you can save time or save energy but still complete the chores satisfactorily. Follow the plan throughout the week, making note of any instances where a chore takes more or less time than you budgeted; adjust the rest of the week's chores accordingly, so that you can still successfully complete all of them by the end of the week.
- □ Create a budget that takes into account all of your spending money and any anticipated expenditures in the next month. Try to identify ways that you could cut costs and create some savings for yourself. Think about what you'd like to do with those savings: Could you upgrade something you were already going to purchase? Should you save that money for something you really want to buy or do in the future? This thought process will help you understand the value of budgeting and saving money where possible.
- □ Need to repair something, like your bike? Make a list of the steps you will need to take to make the necessary repair, consulting online sources to help you, if necessary. Once you have outlined the steps you will take, identify any costs (e.g., parts you may need to replace) and where the money to pay for those items will come from. Decide whether you need to enlist subject-matter experts to help with any aspects of the repair (and, if so, identify the costs associated with that help). Follow the steps you outlined and make note of any times that the process you actually followed deviated from the steps you had planned so that you will have a fine-tuned process in place, should you ever need to complete the same repair in the future.

