**Discussion 1.1: What is an engineer?**

Before we jump into this book, take a minute to reflect. After all, you chose this major for some reason. What do you think an engineer does? Why did you choose this major? Your answer doesn't need to be a page long, just write a few sentences to reflect.

**Discussion 1.2: Time Traveler**

For this discussion, we are going to continue role playing as if we were from 1918. Consider being transported to the year 2018 for a year, long enough to learn about current technology. After a year you are transported back to 1918! Draft a short letter to your mother explaining a current technology to a person in 1918. To complete the old-timey feel, you can also hand-write your response and upload it instead!

**Question 1.1: BLS Stats on Engineering**

Your task for this problem is to sort the engineering careers by "Job Outlook, 2016-2026" in descending order (High to Low). ​["Job Outlook, 2016-2026" (Links to an external site.)](https://www.bls.gov/careeroutlook/2018/article/engineers.htm) represents a BLS estimation of how fast the engineering careers will grow in the next decade. Keep in mind the careers we are looking at are NOT tech jobs!

**Question 1.2: Another look at those statistics…**

Look at the BLS projections for Biomedical Engineering vs Computer Hardware Engineering. Based off the projections, and even though Biomedical Engineering is growing faster, how many more Computer Hardware Engineers will be employed as compared to Biomedical Engineers in the year 2026?

**Discussion 1.3: What is your major?**

What engineering major are you currently enrolled in? What does the BLS say they do? What type of thing do they make? Are you interested in making that thing? Make sure to write in your own words, plagiarism is not OK! If you are a double major, you can either pick one, or pick both to describe here.

**Discussion 1.4: Do you have what it takes?**

Use these questions to reflect on:

* What are your strengths?
* What are your weaknesses?
* Do you have good time management skills?
* Are you ok with studying for long hours and working on hard problems without easy solutions?

Use this self reflection to make sure that you are in the right place. There are no right or wrong answers to these questions. They are simply for you to start having a conversation with your self about what is right for you.

**Ethics: Nobel’s Legacy**

Most people recognize the name Nobel and associate it with the Nobel Prize. The Nobel Prizes are arguably the most prestigious and famous scientific, literary, and social achievement awards in human history. What most people do not realize is that it was named after Alfred Nobel, a Swedish engineer credited with inventing dynamite. Nobel had an interesting opportunity to read his own obituary (it was published on accident) which was scathing and condemned him for profiting off of the sale of weapons. Realizing that his legacy was one of death and destruction, Alfred bequeathed his fortune to create the Nobel Prizes.

In the future you may have the opportunity to design and create something that will be used in a way you didn't intend. Let's pretend that you create a software algorithm that eliminates the jobs of 100,000 people. Your company is pleased and you get a raise! After all, you have increased profits by a huge margin.

For this weeks online discussion post, write your own obituary. What do you think it will say? Will the world look kindly on the innovator that gave them the algorithm that increased productivity and profits? Will it lament the loss of jobs and curse you as a job killer? Read some [NY Times obituaries (Links to an external site.)](https://www.nytimes.com/section/obituaries) to get a feel for how they are written before you write your own.

**Personal Reflection – Chapter 1**

Did anything resonate with you about this chapter? Are you more excited about becoming an engineer? Do you have any fears or anxieties? What can you do about those?

**Request for Feedback – Chapter 1**

What did you think of this chapter? Anything stand out as exceptionally good? Anything that you would like to see differently? Any feedback is appreciated.