

Name:	School:	
name:	SCHOOL:	

## Haskin—Human Resources

#### **Career Research Guidelines**

Choose a career in your pathway that you are interested in. Use information you will find on GACollege411.com to find the information.

# **Occupational Information Student Worksheet**

Find out some information about the selected career. Answer the following questions thoroughly and using complete sentences.

Make sure you find information in all of the following areas:

Job Title:

- 1. Salary (How much does this job pay on the average?):
- 2. Educational Requirements (What kind and how much education do you need for this type of career?):
- 3. Job Description (What do they do?)
- 4. Occupational Outlook (Are there any job openings for this career, what is the outlook?):
- 5. Personal Characteristics/Abilities Needed for this Career:
- 6. Advantages:
- 7. Disadvantages:
- 8. Working Conditions (Inside, outside; lifting or not; hours; etc.):
- 9. Would I be suited to this job and consider it as a career possibility?
- 10. At least ONE address where I could find further information:



Name: Zach Goff

# 110/100

**Feedback:** Zach, this is beyond what I asked. Great job! I think you are well suited to be an amazing engineer.

# Haskin—Human Resources

#### **Career Research Guidelines**

Choose a career in your pathway that you are interested in. Use information you will find on GACollege411.com to find the information.

## **Occupational Information Student Worksheet**

Find out some information about the selected career. Answer the following questions in the space below

Make sure you find information in all of the following areas:

Job Title: Mechanical Engineer

1. Salary (How much does this job pay on the average?):

\$87,370 (for mechanical engineers)

# 2. Educational Requirements (What kind and how much education do you need for this type of career?):

A bachelor's degree is typically required for entry-level mechanical engineering jobs. Theses curricula have significant coursework in advanced math and science. Mathematical requirements consist of calculus and differential equations. A sequence in physics and a chemistry course encompass the required sciences.

The coursework specific to mechanical engineering involves topics in energy and machine mechanisms. Energy-related topics include thermodynamics, fluid mechanics, and heat transfer. Courses in machine mechanisms cover materials, manufacturing processes and system design. Mechanical engineering students may take some courses from the computer science, civil engineering and industrial engineering departments.

### 3. Job Description (What do they do?)

Mechanical engineers apply physics and mathematics to help construct and improve buildings, building systems and products ranging from tools to generators. As such, mechanical engineers may work in a number of industries, such as the automobile or manufacturing industries. Mechanical engineers need at least a bachelor's degree. Professional engineering licensure is not a firm requirement for all mechanical engineers, but many may need it, depending on their industry and job duties.

# 4. Occupational Outlook (Are there any job openings for this career, what is the outlook?):

The projected percent change in employment from 2016 to 2026: 9% (As fast as average)

#### 5. Personal Characteristics/Abilities Needed for this Career:

Key skills for mechanical engineers include: effective technical skills, the ability to work under pressure, problem-solving skills, creativity, interpersonal skills, verbal and written communication skills, commercial awareness, and team working skills

## 6. Advantages:

- Mechanical engineers are always in demand therefore if you are a mechanical engineer employment is never a problem if you are a truly skilled engineer
- There is a wide range of subjects available in mechanical engineering.
- You can specialize in automobile engineering, aerospace engineering, marine engineering, mechanical engineering and many more.
- With such a broad range of career opportunities, you are very likely to find something that suits your needs.
- Excellent pay potential. You get paid a lot if you are experienced and have good technical and management skills.
- Once you get placed in a good company you don't have to worry about your future.
- Exciting workplaces. Becoming a mechanical engineer could take you to some interesting places such as oil rigs, deserts, the deep sea, automobile industries, and power industries.
- If you are specialized in designing you can work in an office environment.
- Global Opportunities. There isn't a country in the world that doesn't need mechanical engineers and there are a number of mechanical engineering courses which can testify to that.

### 7. Disadvantages:

- Competitive atmosphere. Although mechanical engineers do receive favorable advancement opportunities, generally these don't come easy.
- It is difficult for new graduates to get placed in good companies unless there are some very good colleges or have great skills.
- With the exception of self-employed Mechanical Engineers which can be difficult
  without prior experience. The best paying jobs in the field often come from large or
  multinational corporations whose working environments have become increasingly
  competitive due to recent economic conditions.
- Fresh graduates start out as low as assistant or associate engineers and undergo thorough training and evaluation for a year or two after which a few get promoted.
   Promotions are heavily performance-based.
- As an engineer gets bumped up to a higher level competition gets more serious. Also, it
  is very well known that good companies don't like to recruit new mechanical engineers,
  they like the experienced ones.

## 8. Working Conditions (Inside, outside; lifting or not; hours; etc.):

- usually work regular business hours but may be required to work evenings and weekends to fit in with process schedules and meet deadlines
- work in workshops, factories and offices and on building sites
- may have to work around heavy machinery or at heights, or in noisy and dirty conditions
- may have to travel between sites locally or supervise projects overseas.

#### 9. Would I be suited to this job and consider it as a career possibility?

I was recently accepted into Georgia Tech and I believe that I am well suited for this occupation. I have the math skills, motivation, and drive to be a great engineer.

#### 10. At least ONE address where I could find further information:

https://study.com/articles/Mechanical Engineer: Mechanical Engineering Career Education.html