

Engineering Career Exploration Assignment

In this assignment you will be exploring more about the specific engineering discipline that you wish to pursue as a major and career. You may work individually or with a group of up to 4 students on this assignment.

Assignment Requirements

Pick an engineering discipline to learn more about from the list below:

- Electrical Engineering
- Mechanical Engineering (including Aerospace if interested)
- Chemical Engineering
- Civil Engineering/Environmental Engineering
- Bio/Biomedical Engineering
- Computer Systems Engineering
- Computer Science
- Materials Science & Engineering
- Industrial Engineering

Once you pick a discipline, you will need to research more about it. Please make sure you use valid, trustworthy sources and that you cite the sources that you use.

Some questions you should investigate are:

- What do engineers in this discipline study?
- What career options are available for this specific engineering discipline?
- What types of companies do engineers in this field work for?
- What do engineers in this discipline do on a day-to-day basis?
- What types of projects do engineers in this discipline work on?
- What unique skills and knowledge are necessary to be successful in this specific field?
- What professional societies are available for this engineering discipline?
- Do you need to have a professional engineer license to be successful in this discipline?

These are just a few sample questions. There are many more you will probably be curious in learning about! Feel free to include any information relating to the discipline/career that you discover in your research.

Deliverables

When you have gathered your information, you should do the following:

- Write a report containing your findings.
- Prepare a brief presentation of your findings to share with your classmates.
- Prepare a 1-slide overview/highlight of your findings to be displayed around the EMCC campus. Create an interesting slide, but make sure people are able to read it clearly!

Required Components

To get full credit for completing this assignment, your report and presentation must include:

- Description of engineering discipline including possible careers
- List of professional societies specific to the discipline
- Brief description of at least two professional engineering societies
 - One that is discipline specific
 - One that is general (not specific to the discipline)

You may choose what you feel is most important to include on your highlight/overview slide, but make sure it is relevant to the career/discipline.

Due Dates

Final Report & One-Slide Overview

Your final report and one-slide overview/highlight are due by 11:59 P.M. on **Wednesday, January 29th**.

Presentation

You will be presenting your findings in class on **Wednesday, January 29th**.

Grading

This assignment is worth 100 points:

- Report 50 points
- Presentation 30 points
- Overview Slide 20 points

See the attached rubrics for specific point allocations for each part of this assignment.

Rubric for Report

	3	2	1	0
Required Content (30 points)	All required content areas are covered in report and the topic is described in great detail.	One of the required content areas is missing. Topic is described in some detail.	Two of the required content areas is missing. OR Topic description is very vague and lacks sufficient detail.	None of the required content areas are included and/or almost no detail is given in the topic description.
Grammar/Clarity (9 points)	There are no grammatical errors. The report is clear and easy to understand.	There are a few grammatical errors, but the report is still clear and easy to understand.	There are some grammatical errors and the report is unclear and difficult to understand at times.	There are many grammatical errors and the report is very unclear and difficult to understand.
Neatness & Organization (6 points)	The project is presented in a neat, clear and professional manner. It is clear that a lot of thought and effort went in to creating the finished project.	The project is presented neatly, and some thought or effort went into creating the finished project.	The project is presented neatly for the most part, but not much thought or effort went into creating the finished project.	The presentation of the project is very sloppy and disorganized. Little to no thought went in to creating the finished project.
Citing Sources (5 points)			Sources are cited and are credible.	No sources are cited. OR Sources are of questionable validity.

Rubric for Presentation

	3	2	1	0
Required Content (21 points)	All required content areas are covered in presentation.	One of the required content areas is missing.	Two of the required content areas are missing.	None of the required content areas are included.
Participation (9 points)			Team member is present and participates in presentation.	Team member is not present for or does not participate in presentation.

Rubric for Overview Slide

	2	1	0
Relevant Information (8 points)	Information presented is relevant to chosen career/discipline and is interesting. Amount of information presented is appropriate for a one-slide overview.	Information presented is relevant to chosen career/discipline and is interesting. Too much or too little information is presented for a one-slide overview.	Information on slide is not relevant to career/discipline.
Neatness & Organization (6 points)	Layout of slide and information presented is easy to read & understand.	Layout of slide is somewhat organized but too much information is included to easily read & understand information presented.	Slide is messy, unorganized, and difficult to read/understand.
Creativity of Presentation (6 points)	Information is presented in a highly creative manner that will catch the eye of those walking by.	Information is presented in a somewhat creative manner.	Little to no creativity is shown in the presentation of information.

Assignment Score Sheet

Report

Required Content _____/30 = _____

Grammar & Clarity _____/9 = _____

Neatness & Organization _____/6 = _____

Cite Sources _____/5 = _____

Report Total _____/50

Presentation

Required Content _____/21 = _____

Participation _____/9 = _____

Presentation Total _____/30

One-Slide Summary

Relevant Information _____/8 = _____

Neatness & Organization _____/6 = _____

Creativity of Presentation _____/6 = _____

One-Slide Summary Total _____/20

Assignment Total _____/100