Name Gage Farmer Date 1/24/2022

Introduction to the types of Engineering/Part 2 of the final project

It is a course requirement that students be introduced to a variety of engineering fields. With out switch to online teaching we have lost some of our labs and our final project which help students be introduced to different engineering fields. The goal of this exercise is to help you think through your career choice options. This worksheet is worth 10 points.

**Your Work Interests**

These questions have no wrong or right answers and are just to help you clarify your likes and dislikes. Pick the answer(s) that most apply to you.

I prefer the \_\_\_\_\_ indoors \_\_\_\_ outdoors **\_\_X\_\_ a mixture of both.**

I would like to \_\_\_\_\_\_work for myself \_\_\_\_\_ work for a manufacturing company

\_\_\_\_ work for a government agency \_\_\_\_\_ work for a consulting company

**\_\_X\_\_ Other – work with a company designing components**

I would most like to \_\_\_\_ work with my hands \_\_\_\_ work at a computer or desk

\_\_\_\_ work in a lab \_\_\_ work directly with people

**\_\_X\_\_ do product design** \_\_\_\_\_do structural design \_\_\_ other

In deciding about where you would like to live think through your relationships, what climate you would like to live in etc. I would like to work **\_\_X\_\_ specifically in a particular area** \_\_\_ go anywhere!

In choosing an engineering field think through your personal life choices to see if they match where your engineering field choices might take you. For example; if you choose petroleum engineering then expect to go where large oil reserves are. Do you know where that would be? If you are interested in aeronautical engineering think through where those jobs would be and does that fit with your life goals? If you are interested in large construction projects are you willing to relocate as projects change?

These are personal life choices and do not write an answer to them here. The goal of this assignment is to think through your decision.

Research often requires advanced degrees. Does that interest you to go beyond a B.S. degree and go into research? **\_\_X\_\_ yes** \_\_\_ no \_\_\_\_ not sure!

Name 4 other colleges offering a B.S. degree in Engineering within Ohio.

THE Ohio State University

University of Cincinnati

Miami University

Case Western Reserve University

Review the paper on Blackboard under Our Classroom and Tutorials about the Types of Engineering and any other websites you might be interested in. The paper provided is not an exhaustive list of the types of engineering and you would benefit from looking at other resources as well.

Name three types of Engineering you are interested in and at least two schools for each that would offer that degree program:

1. Computer Engineering – OSU & UC
2. Electrical Engineering – OSU & UC
3. Mechanical Engineering – OSU & MU

Look at the paper on Blackboard about the types of Engineering. On the last pages are a list of career fields. Name three of these career fields or others not mentioned that particularly interest you. For example energy, robotics, sales etc.

1. Intelligent Systems
2. Computing
3. Semiconductors

My dream job would be…

To be on the GPU hardware design team at Nvidia.

**Investigating what is Engineering Technology**

The 1181 course you currently in is on a track to a B.S. degree in Engineering. To help you understand what is Engineering Technology and if that is a possible career choice you would like, look on the Columbus State website under Engineering Technology/Science and Technology and answer the following questions:

1. What majors are available in Engineering Technology at Columbus State?

Electro-Mechanical Engineering Technology Associate of Applied Science Degree

Electronic Engineering Technology Associate of Applied Science Degree

Mechanical Engineering Technology Associate of Applied Science Degree

1. About how many semesters is required for the A.S. Engineering Technology degree?

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1. Describe briefly the program between Columbus State Engineering Technology and Miami University? (Answer questions like: Where are the courses taken? What is the degree earned?)

After completing the associates degree from Columbus State, students are able to take another two years at Miami in order to get their Bachelor of Science, and these bachelor classes are taken at Miami University.

1. Name three other programs in the science and technology areas at Columbus State that are interesting to you.

(For example HVAC Tech., aircraft mechanic, electrician etc. )

Automotive mechanic, robotics, physics

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**Your Strategy**

There are many Engineering schools and many Engineering majors. Create a plan A for what major, degree and what school you are most interested in. Create back up plans B and C.

Your Tentative Engineering Education plan:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Major | Degree(s) : A.S., B.S., M.S., Ph.D | School(s) |
| Plan A | Electrical and Computer engineering | B.S. (probably M.S.) | Columbus State  OSU (UC and MU as backups) |
| Plan B | Automotive Engineering | B.S. (maybe M.S.) | Columbus State (MU as backup) |
| Plan C | Anything else and hate myself forever | Whatever | Wherever |

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