

Understanding your Career Field

GET FAMILIAR WITH OUR 18 CAREER FIELDS

#8 ENGINEERING

Why choose Engineering?

Engineering is a broad career field consisting of many specializations in mathematics, science, and application. From mechanical engineering to software internships and everything in between, we have companies around the world looking to work with people like you to fill specific roles, projects, and responsibilities.

Sample Future Careers

- ★ Consulting
- ★ Technical Writing
- ★ Business development
- ★ Manufacturing and production

Key Skills you may learn

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| <ul style="list-style-type: none">● Back End Software Development● CAD Design & Modelling● Data Modelling● Edit Technical Reports● Feasibility Study and Evaluation● Front End Software Development● Project Management● Prototyping | <ul style="list-style-type: none">● Research & Development● Research Regulations & Standards● System Design & Analysis● Testing and QA● Use Data and Facts to Solve Problems● User Journey Flow● Working With Large Data Sets |
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Placement

Placement: Engineering Internship (Sussex) @ Clickmox Solutions Inc

Placement Career Field: Engineering

Placement Country: Canada

Project 1: Design of a water- and dust-proof quad-copter for high altitude regions.

This project involves mechanical design of a quad-copter UAV for use in high altitude areas with parameters as provided by the company. The intern will be required to perform the following tasks, which can be done in parallel by multiple team members.

Project 2: The intern will be required to work with the project team lead to:

- Determine motor kV (given drone weight) for high altitudes.
- Determine propeller size and blade angle.
- Determine motor tilt.

Thereafter, the intern will be required to work on the Design of the UAV frame with given payload.

Project 3: The intern will work under the supervisor of the team leader to Perform system simulations (Clickmox will provide help to the students with simulation framework). This part will require the intern to learn the basics of Robotic Operating System and Gazebo on the Ubuntu platform.

The intern is not expected to build the drone actually or perform any flight controller programming.

Please note: The projects and actual tasks may vary and can be discussed with your supervisor before and during your internship.

Skills You Will Learn

General Skills: Critical Thinking/Problem Solving; Teamwork; Technical/computer skills

NACE Career Readiness Skills: Critical Thinking/Problem Solving; Teamwork/Collaboration; Digital Technology

Career Field Skills: CAD Design & Modelling; Prototyping; Research & Development; System Design & Analysis