

C++ Crash Course 2

Due May 22 by 11:59pm **Points** 0 **Submitting** a text entry box

The objective of this assignment is to increase your understanding of how to write C++ code to solve mechanical engineering problems using Visual Studio. You will learn the following principles of C++ programming:

1. How to create, compile, and run a C++ program with multiple source files
2. How header files (.h) and source files (.cpp) differ
3. How to use the *vector* library when array or matrix sizes are unknown in advance
4. How to perform matrix operations like matrix inversions and matrix exponentials
5. How to solve the state equation $\dot{x} = Ax + Bu$

What to submit

Complete the chapter **C++ Crash Course 2** in the textbook *AutonomousFlight.pdf*. Demonstrate your working C++ program to the instructor to get credit for this assignment.

Copy and paste all your code from each file into the Text Entry box. The instructor should be able to copy and paste your code into Visual Studio and run it to check whether it works.

COPYRIGHT 2023 BRIGHAM YOUNG UNIVERSITY-IDAHO