

## Project Deliverable E: Project Schedule and Cost

### GNG 1103 – Engineering Design

Faculty of Engineering – University of Ottawa

#### **Objective:**

Develop a project plan and a schedule to ensure that your team is able to complete all three project prototypes from now until the end of the semester and provide an estimation of the costs and the components that will be required for your project.

#### **Instructions:**

Teams must outline a plan and a schedule for prototyping and testing their solution to the client's needs, by the end of the semester. Three prototyping deliverables will be due from now until the end of the semester (see due dates in BrightSpace). The first prototype will be a basic proof of concept and should be made using materials and components that cost very little (e.g. things found around the house, scraps, etc.). A simple analysis of critical components or systems should also be included, based on your current knowledge of engineering science or other material. The second prototype should be of a (or maybe *the* most) critical subsystem, in order to ensure that your design will work. An analytical, numerical or experimental model should also be included. Finally, the third prototype should be a fully functional version of your solution (i.e. a comprehensive prototype).

For each iterative step, your effort to improve your solution should be obvious. Your plan should include:

1. A list of all the tasks which need to be completed, an estimated duration for each task, as well as who is responsible for each task
2. A Gantt diagram (preferably made using MS Project), which includes all significant project milestones and all dependencies.
3. A list of the significant project risks and your associated contingency plans to mitigate the critical risks that are *reasonably* likely
4. An estimate of the cost for all components and materials which you will need for the different prototyping deliverables described above

For the project, each team will be allocated \$100. To spend this money, you must have the cost of your materials and components approved by your TA. You will purchase materials and components yourselves and you will bring your TA the original receipts for a reimbursement. It

is easier if only one person on your team makes all the purchases, but you must provide receipts.

***Submission:***

Each team (***only one person from each team***) must submit a PDF copy of this deliverable by uploading the file as an attachment into BrightSpace.

***Due Date:***

See BrightSpace.