

**Homework #8 – Double-weighted**

This project is *open-ended*. You are free to choose a topic of interest to you. The project must contain the following:

- the project must be developed using Excel and VBA
- the basis of the project must be some type of engineering or scientific calculation
- there must be a user interface, including more than one user form

You may wish to select a topic from a math, chemistry, physics or engineering course. You may also find a topic from another source, such as an engineering text. It is important that you identify a topic soon and get started on it.

Include the following elements in your project report:

- 1) statement of the problem
- 2) strategy of solution
- 3) basic data, indicate sources of information where appropriate
- 4) a print-out of your VBA program code, include comments
- 5) print-outs of your Excel spreadsheet showing example results, along with a discussion of those results
- 5) a calculation check made using a calculator
- 6) limitations of the solution – where will it fail?
- 7) references, if used

Some advice: Students often pick a topic and define a scope that is far too ambitious for a project like this. You don't want to come up with something so complicated that you can't get it done. At the other extreme, you don't want to have a project that is too simple, since it will look like you didn't do very much for a double-weighted project. So, think carefully about the scope of your project and try to find a balance between simplicity and complexity. Since this is an open-ended project, part of your grade will be assigned to creativity.

Special note: We would not expect more than one student to be developing the same project. Since there are so many choices to be made in how to layout and design things, we would expect every project to look very different.