

# EE486 Work Breakdown Structure

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## YOUR Tasks and Deliverables (DR3 Individual)

### General Information

- *Due Date:* February 26, 2018.
- *Grading:* Grading will be done at an individual level (see the Rubric).

A Work Breakdown Structure (WBS) is a formalized set of activities required to complete a project. An activity is a combination of tasks and deliverables. While there are several slightly different ways to organize a WBS, and the military has formalized the WBS in the Work Breakdown Structure Handbook [MIL-HDBK 881], we will be using a class specific abridged version.

### The Assignment

Using the following format, identify the activities and related tasks and deliverables that *you* will be responsible for completing in this project. This is individual, yet will be combined into your team Design Review 3 presentation. Here, I want you to submit (via BBLearn), with the following information (oh, and hint here, you *can* use your Gantt chart assignments as a guide).

Start with the activities you'll need to complete for your project. You've done this already, but I want you to consider them again here. Next, breakdown the tasks that you will need to complete this activity. I know you can do this, as you have been doing this the past few months as you have been working on your projects. Finally, what are the deliverables from these tasks? The deliverables do not need to be documents that you'll share with your client or mentors, but can be thing such as functionalities of your project. See the example attached on the next page.

### Deliverables

- Start your submission off with an introduction / summary of your project. This must be your own writing, no exceptions. This should also be new content, not a recycled paragraph from a previous slide deck or assignment submission.
- In tabular form, provide a list of the activities, tasks, and deliverables that *you* will be responsible for to complete your project.
- Submit via BBLearn.

This example is adapted from “Design for Electrical and Computer Engineers,” but modified to reflect what I expect from you. *Your WBS should reflect what you will complete on your project.* Think of this as a contract between you and your team/professor. If there are tasks that you are responsible for, but will also have input from another team member, note that.

Person Primarily Responsible: John D.				
ID	Activity / Task	Description	Deliverable(s)	Other People
<b>1</b>	<b>Interface Circuitry</b>	leave this line blank, for the highest level of activity		
<b>1.1</b>	Design Circuitry	Complete the detailed design and verify it in simulation	<ul style="list-style-type: none"> <li>• Circuit schematic</li> <li>• Simulation verification</li> </ul>	-
<b>1.2</b>	Purchase Components		<ul style="list-style-type: none"> <li>• Identify parts</li> <li>• Place order</li> <li>• Receive parts</li> </ul>	Place order our order specialist.
<b>1.3</b>	<b>Construct and Test Circuits</b>	Build and test.	this is really a task in 1, but is major enough it's listed as an activity	
<b>1.3.1</b>	Current Driver	Construct and test of circuit with sensing device.	<ul style="list-style-type: none"> <li>• Breadboard circuit</li> <li>• Test data</li> <li>• Measurement of linearity</li> </ul>	-
<b>1.3.2</b>	Level offset and gain amplifier	Construct and test of circuit with voltage inputs.	<ul style="list-style-type: none"> <li>• Breadboard circuit</li> <li>• Test data</li> <li>• Measurement of linearity</li> </ul>	-
<b>1.3.3</b>	Integrate 1.3.1 and 1.3.2 circuits	Integrate two breadboard circuits into one.	<ul style="list-style-type: none"> <li>• Single breadboard circuit</li> <li>• Test data verifying functionality and linearity</li> </ul>	Testing help from Jane D.
<b>1.3.4</b>	Perfboard circuit for deployment	Copy breadboard onto soldered perfboard.	<ul style="list-style-type: none"> <li>• Soldered circuit</li> <li>• Test data verifying functionality and linearity</li> </ul>	-

At the end of the semester, we will look back at this to evaluate if you completed your parts of the project. For those parts that you were unable to complete, you'll want to be able to justify why. There are several good reasons why you might not be able to complete any given task, such as “Our circuit was able to function, but was not able to function within the limits the client required.” And as you should be able to guess, there are also several reasons that are not acceptable. “I was too busy with other classes,” “I couldn't find a soldering iron,” or “I was waiting for Jane to help with testing” are all unacceptable reasons for an incomplete project. That being said, you can expect feedback on your list, whether too short or too long.