

Milestone Two Project Plan

Your project needs a more detailed plan beyond what I have provided in the project milestones documents for each project. I suggest you start with the project plan milestones, and fill in more details of what you need to do to accomplish each one. Each milestone is a mini project in itself. It needs a plan. For example, in Electronics II, we design, build and test software defined radios. The milestones I have for that project follow a somewhat general pattern for design, which you may recognize from Capstone too. Even the milestones I laid out for you follow the same general ideas. Here are the milestones I have for Electronics II as a concrete example:

Project Milestones and Due Dates:

Lab	Topic	Project Milestones
1: 3/29	Receiver design research	Bibliography due 4/5
2: 4/5	Develop design goals	Design goals due 4/7
3: 4/12	Receiver Preliminary Schematic	4/12
	Noise Simulations	4/19
4: 4/23	Revisions, and initial PCB design	Prototype schematic, circuit description and simulation due 4/23
5: 4/27	Receiver PCB design	Receiver Gerber files due 4/28 at noon
6: 5/7	Software Tools setup	Quisk and VScode/PlatformIO setup and working on your PC 4/30
7: 5/14	Board Bring Up Plan	5/5
8: 5/21	PCB build and test	PCB initial test results due 5/19
9: 5/28	Debugging and Revisions Documentation	Schematic changes, test results due 5/26
10: 6/4	Documentation	Due: 6/10

The first thing to do is research to bring yourself up to speed on how things work, what others have done, etc. The second is to make some goals for your project. The third is to begin to develop an idea how you will achieve those goals. Then you do simulations to make sure your simplified understanding is about right. Then you plan your prototype, including how you will bring it to life. After that you make your prototype, and carry out your plan to get the measurements you need. This is often kind of a rehash of what you did in simulation. Then you debug your setup and fix what you can. Documentation is what engineers really produce, so don't leave it out, and after this you cycle through the whole thing again with the next revision, armed with your new experience.

So make a careful plan for each milestone I have laid out. You may need to add some, but this plan will help you have success with your project.

Here is a rubric that may help you as you develop the overall plan for your project.

Project Milestone Details

	Exceeds	Sufficient	Not Sufficient
Completeness	Sufficient, but additional milestones that make good sense and lead to additional learning are added.	Each milestone has a complete plan.	Non all milestones have plans, or plans are insufficient to meet milestones.
Plan Quality	Sufficient, but perhaps the plans that have been previously laid out, are significantly improved.	Plans are well thought out, and make good sense.	Plans do not make good sense.