

ENGR 310
Assignment 7: Detailed Design Review

At this point, you should be well along the controlled convergence process, having converged (or very nearly converged) to a final solution approach and have a system architecture plan mostly worked out. You now have a myriad of design details to work through to meet the project goals.

For your team advisor meeting during the week of April 14, present:

1. Project Status – Present your project plan, and the project status against that plan. A visual way to do this is to use the Gantt chart representation of your project plan, and shade each task bar according to your estimate of percentage complete.
2. Final System Architecture – Review the final plan for the system architecture that shows the major subsystems and how they will interface with each other, the environment, and the user. Choose suitable representations.
3. Current Detailed Design – Present all detailed part drawings, schematics, computer code, bills of materials, purchased component specifications, etc. completed to-date. Since this is a status update, it need not be 100% complete.
4. Engineering Analysis and Test Results – Describe the engineering analyses you have done, and the results. Also, describe any prototyping and testing you have done, and the results. Focus on the design metrics you have defined, and verify performance against design objectives and specifications. Are any design modifications required?
5. Cost Analysis – A tabulation of the system costs and assessment of whether the costs are acceptable against your project goals.
6. Next Steps – Review your project plan (including the responsibility matrix) for the coming weeks, and note any adjustments needed.

Place all documents under the appropriate tabs in your team notebook, and hand-in to your team advisor at the appointed location and time.