
Proposal Format

4-6 pages (can be longer)

- Page lengths are based on pages being 12 point font (or smaller)
- Page lengths are based on pages being "singled spaced"
- Recommend you use Google doc format to allow for simultaneous team editing.
- The 1st cut proposals can be text, but as the DRAFT and FINAL PROPOSALS must contain block diagrams, etc., please submit the DRAFT and FINAL PROPOSAL as a PDF file.

Proposal Outline (detail section with prose, can use bullet or tables for schedules or lists)

- Title of the Project (e.g. "Wall Mapping Robot")
- ONE or MULTI-WORD HYPHENATED Short Team Name (**related to the project** e.g. wall-mapping robot, team name "ROVER")
 - the short team name can be Hyphenated, e.g. "BLUE-TEETH", and/or "Camel Case", e.g. "BlueTeeth" or "Blue-Teeth"
- A One-Sentence Project Description
- List Team Members and Likely Responsibilities
- Objectives / Goals](paragraphs)
 - what are you going to design and build?
 - what is the specific "mission" of the project? e.g. for a wireless sensor project, "detect intruders and notify"
 - describe what is a success?
 - describe what is a failure?
 - who is your customer?
 - specify constraints on the design, e.g. size, weight, performance, interfaces, cost (i.e. \$200)
 - detail specific Fall goals (experiments, tests, prototypes) and specific Spring goals (finished system, results)
 - The team should complete a reasonable prototype at the end of the fall semester; describe that

prototype (e.g. "circuit prototypes and early software demonstrating the functions of the proposed project")

- Approach (paragraphs and bullets)
 - overall scheme, design approach, design using ?
 - build this, integrate that, write this software, etc.
 - how to test, debug, etc.
- Block Diagram (whatever makes sense - system, hardware, software) is REQUIRED
 - can be hand-drawn (take a photo)
- Equipment Needed (bullets)
 - a rough idea of components (hardware, software, etc.) and other equipment needed (test equipment, etc.)
- Budget (assume \$200 for now) (bullets)
 - cost if you know it or can estimate
- Plan/Schedule](across 2 semesters, provide more detail for Fall) (table or bullets)
 - a rough guess at the time frame to accomplish steps in the approach
 - milestones - these are defined points which demonstrate you are making progress toward your goal
- Challenges (paragraphs or bullets)
 - what is going to be hard (or hard for your team)
 - equipment that you don't understand
 - skills you need or have to learn
- References (if any)
- Include drawings if that helps explain the problem (can be hand-drawn and scanned/photographed)