Proposal

- Write a proposal to perform a project, undertake research, develop a program, solicit funding, or some combination thereof

- ECE372 proposal is “to perform a project”

Proposal Contents

- Abstract
- Introduction/Problem Statement
- Objectives and Goals (Proposed Solution)
- Previous Work
- Technical Details
- Budget
- Work Plan (Timeline, Deliverables, and Responsibilities)

Goals:
- Define problem and proposed solution
- Demonstrate solution is technically feasible and cost effective

Abstract:
- Short summary of proposed work
- Follow guidelines for writing an abstract

Introduction/Problem Statement:
- Provide context for problem
- Define problem/project that will be solved/built by the proposed solutions
- Problem statement can be related to developing a product or undertaking a project
  - Build a better widget or develop new widget
Proposal Contents

Objectives and Goals (Proposed Solution):
- Provides a discussion of the proposed solution
- Defines specific goals/aims of the proposed work
  - ECE372 Specific:
    - What do you want your proposed device to do?

Previous Work:
- Summary of existing work or related products
  - Demonstrates understanding of context of problem and existing solutions
  - How is proposed solution better
    - e.g., more cost effective, better design, more elegant solution?
- Discussion of preliminary data supporting proposed solution
  - How does authors preliminary research/work demonstrate the feasibility of the proposed solution

Technical Details:
- Describes the technical details and design ideas to implement your proposed solutions
- Addresses the question:
  - How do you plan to solve the proposed problem?
  - Is the proposed solution technically feasible?
  - ECE372 Specific:
    - How are you going to implement your project?
    - Provide description of functional units, flowchart, block diagrams, etc.
    - What components will be used to build project?

Budget:
- Defines the costs associated with performing the work outlined in the proposal
- Provides complete breakdown of funding needed
- Addresses the question:
  - What do you need to solve the proposed problem?
  - Is the proposed solution cost effective?
  - ECE372 Specific:
    - Components list and estimated costs
    - Your budget is $25 per team member

Work Plan (Timeline, Deliverables, and Responsibilities):
- Provides details regarding how and by when the proposed solution will be carried out
- Should demonstrate that your proposed solutions/project can be accomplished within the provided timeline
  - Deviations from the proposed plan may occur and should be documented
  - ECE372 Specific:
    - Must provide a weekly timetable detailing how you plan to complete your project
    - Ensure your project can be accomplished in the available time
Proposal Contents

Work Plan (Timeline, Deliverables, and Responsibilities):

- Deliverables
  - What will be available when the proposed work is completed
    - e.g., product prototype, final product design, algorithm for solving problem, etc.
  - ECE 372 Specific:
    - Must define deliverables at the three dates listed in class schedule
    - Must also define final deliverables (which should be correctly functioning final implementation)

- Responsibilities
  - Details who will performing each element of the proposed work
    - Very useful when multiple parties are involved
  - ECE372 Specific:
    - Provide a breakdown of responsibilities of your team members
    - Who is responsible for each element of the proposed work plan?