# Planning the Project Timeline - Critical Course Benchmarks

# Planning and Project Timeline Engineering Design and Development



and Beyond

## CO EDD - Project Management

- α Design Process Overview Beyond EDD
- β Setting Up Documentation
- y Contacting Experts Opportunities
- y Define Teams
- δ Introduce Process Evaluations
- ε Intellectual Property
- α Mini Design (Optional)

#### C1 Research

- A Brainstorm Possible Problems
- A Develop Problem Statement
  Draft Problem Statement
  Finalize Problem Statement
- A Identify Stakeholders
- A Justify Problem
- **B** Analyze Prior Solution Attempts
- C Identify Preliminary Design Goals
- C Present Project Proposal

#### C2 Design

- D Identify Critical Design Goals
- E Application of STEM
- D Generate Multple Solutions
- D Select Solution Path
- F Design Viability Analysis

### C3 Prototype and Test Prepare to Build

- G Create Drawings/Schematics
- G Identify Expert Craftsman
- G Identify Material and Tools
- H Develop Testing Plan Incremental Testing Plan
- G Preliminary Design Review

#### Prototype

- G Create Prototype Refine Test
- H Test Prototype
- Analysis

  I Testing Analysis
- I Critical Design Review

# C4 Evalute and Reflect

- J External Evaluation
- K Designer Reflection
- L Designer Recommendations

### C5 Project Presentation

- N Writing Like an Engineer
- M Prepare Final Presentation
- M Final Defense of Project Steps
- N Portfolio Completion
- C5 Next Steps Beyond EDD Weeks 35-36 and Beyond

