Remotely Operated Underwater Vehicle (ROV)

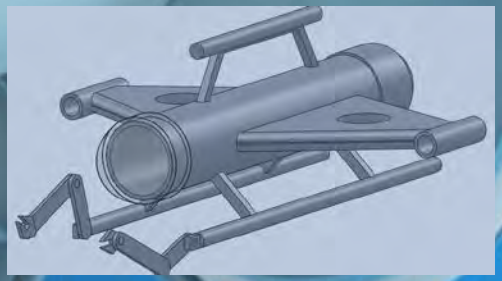
Problem Statement

- To design, test, and build a remotely operated vehicle capable of performing different tasks underwater.

Motivation

- To represent FIU in a national competition
- Apply theoretical knowledge to design most effective ROV.
- Produce cost effective design to compare against commercial units

Proposed Design

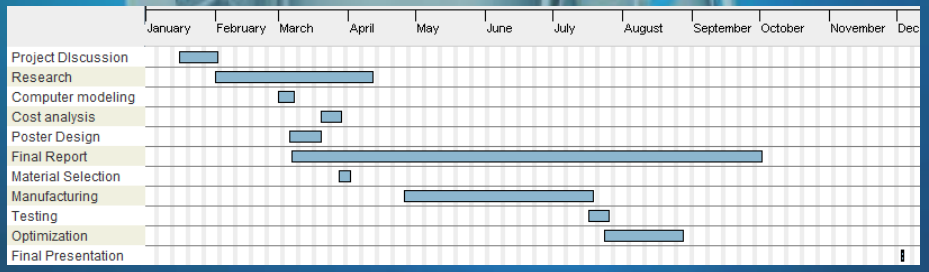


- Clear dome camera housing
- 4 thrusters for propulsion
- 2 servo powered claws
- Neutrally buoyant

Competition Guidelines

- 5 minutes to set up.
- Task #1: Complete a primary node and install a secondary node on the seafloor.
- Task #2: install a transmissometer to measure turbidity over time.
- Task #3: Replace an Acoustic Doppler Current Profiler on a mid-water column.
- Task #4: Remove bio-fouling from structures and instruments.
- 5 minutes to demobilize

Timeline



Team



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