Learning Objectives:

Students graduating from 16.010/16.020 will be able to:

1. Apply discipline specific knowledge from Unified Engineering (Fluids, Materials & Structures, Dynamics, Signals, and Propulsion) to synthesize solutions to CDIO problems and effectively communicate their results.
Measurable Outcomes:

Students graduating from 16.010/16.020 will be able to:
1. Formulate appropriate multi-disciplinary models of engineering systems and identify their assumptions and limitations.
2. Plan and conduct experimental investigations, analyze experimental results, and quantify experimental error.
3. Use models of engineering systems and experimental investigations to evaluate designs, conduct trade studies, and generate new design solutions.
Measurable Outcomes:

Students graduating from 16.010/16.020 will be able to:

4. Evaluate and explain the effects of engineering in a wider social context including economics, safety, environment, and ethics.

5. Communicate engineering results in oral presentations and written reports employing clear organization, proper grammar and dictions, and effective use of graphs, engineering drawings, and sketches.