

Introduction to Engineering Course Standards 2015-16
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Meets A Days Block #1
Meets B Days Block #5

Science Content Standards

Standard: Forces and Motion

Using principles of forces and motion to design, analyze, and improve design solutions.

Standard: Energy

Using principles of energy to design, analyze and improve design solutions

Standard: Matter and Its Interactions

Make observations and measurements to identify materials based on their properties. Use knowledge of material properties to select and use materials to solve challenges.

Standard: Waves and the Electromagnetic Spectrum

The wavelength and frequency of a wave are related to one another by the speed of the wave, which depends on the type of wave and the medium through which it is passing. Waves can be used to transmit information and energy.

Engineering Process Standards:

Standard: Engineering Design

Employs the engineering design process to design, analyze and improve solutions to engineering problems including developing proficiency using a variety of traditional and digital tools, equipment, approaches and strategies.

Standard: Engineering Practices

examples include but are not limited to:

Defining problems

Developing and using models

Planning and carrying out investigations

Analyzing and interpreting data

Using mathematics and computational thinking

Designing solutions

Engaging in argument from evidence

Obtaining, evaluating, and communicating information