

## Module 4 - Energy Methods

ME3050 - Dynamics Modeling and Controls

Mechanical Engineering

Tennessee Technological University

### Topic 2 - Deriving EOMS from Energy

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- Conservation of Energy
- Change in Total Energy
- Chain Chain Chain
- Resulting Equations of Motion

# Conservation of Energy

# Change in Total Energy

# Chain Chain Chain

## Resulting Equations of Motion

The conservation of mechanical energy can be used to derive the equations of motion for many dynamic systems.