

## Designing a Frictional Roller Coaster With Math and Physics!

TeachEngineering

Simulation










Apply high school-level differential calculus and physics to the design of two-dimensional roller coasters.

### Suggested Learning

**Time** 5 : 45 **Cost** 0.00

### PreRequisites

### Requirements

Skills	Focus	Level	Standard	Points
 Applied Science			<a href="#">NGSS</a>	16
 Written Communication			<a href="#">CC</a>	16
 Mathematics			<a href="#">CC</a>	16
<b>Total Skill Points</b>				<b>48</b>

### Knowledge Gain

Estimate the velocity of a rolling body along a curved path, considering friction forces.

### Resource Link

<https://www.teachengineering.org/activities/view/ind-1996-frictional-roller-coaster-design-project-calculus>

Skills Label™

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