

Amusement Park Engineering

We bet your child loves going to amusement parks to experience the variety of fast, dropping, and spinning rides, but have they ever thought about the science that goes into building those rides and the people who are responsible for designing them? In Snapology's Amusement Park Engineering class, students will become engineers of their own amusement park rides and will learn the core physics and engineering concepts used to make a ride thrilling!

What the Students Will Learn

- **Physics and Engineering Concepts**

In this class, students will learn basic physics by examining how the concepts of centripetal and centrifugal force, potential and kinetic energy, gravitational force, and angular momentum apply to the engineering of amusement park rides. Students will get to see these concepts come to life in their own models, enhancing their learning and making difficult concepts much easier to understand.

- **Amusement Park History**

In addition to exploring the basic mechanisms and forces that make amusement park rides so fun, students will also be taught the surprising history of how rides like the Ferris Wheel, Swing Ride, and Bumper Cars came to be.

- **Problem Solving**

It is inevitable that students will face challenges while building, but Snapology programs are structured to positively encourage critical thinking and teamwork to solve problems independently and efficiently.

- **Gear Systems, Motors, Wheels, and Axles**

Students will also explore basic mechanical engineering by building models of their favorite rides using tools like gears, motors, and wheels and axles in order to create movement. Throughout the class they will try various configurations of these parts and learn how their interactions yield different results.

- **Teamwork and Team Planning**

The best amusement park engineers in the world work in teams to design the newest rides in parks, and Snapology's Amusement Park Engineering class is no different. Snapology emphasizes the importance of good teamwork by focusing on healthy teammate behaviors, using team planning activities, and celebrating collaboration.