**HUMAN-POWERED VEHICLE**

**ABOUT THE TEAM**

» Charged with designing and building a vehicle powered only with energy created by a human rider.

» Competes against over 50 teams in events to test design, innovation, speed and endurance.

» Follows restrictions set by the American Society of Mechanical Engineers (ASME).

**ABOUT THE MEMBERS**

» Historically, some 15 dedicated members.

» Mainly mechanical engineering students.

**TIMELINE**

**FALL**

**DESIGN**

» Brainstorm ideas and develop rough drawings of overall design.

» Refine drawings to include dimensions and create an electronic model.

» Perform strength calculations and an in-depth analysis using SolidWorks.

**SPRING**

**MANUFACTURE**

» Weld frame together, assemble vehicle’s drivetrain and steering and install seat belt, headlights and taillights.

» Order components and machine specialty parts.

**TEST**

» Using competition criteria, perform a roll-over test with rider in vehicle, turn radius test and stop test, as well as a test to determine if the vehicle is stable at low speeds.

**SPRING COMPETE + REPORT**

» Write and submit a report to ASME, including details about the design and innovation, with categories such as safety, method selection, cost analysis, testing and analysis.

» Compete in events to test design, innovation, speed and endurance.

**ABOUT THE TEAM**

**ABOUT THE MEMBERS**

**HUMAN-POWERED VEHICLE@CLARKSON.EDU**