Formula Sun Grand Prix (FSGP) is an annual collegiate solar car track event. Teams design and build a solar powered vehicle in accordance with the event regulations. Upon arriving at the track, all solar cars go through an inspection process known as scrutineering. These inspections focus on safety checks, adherence to the regulations and cover all aspects of the car, including mechanical, electrical, body and sizing, and dynamic testing. Cars that pass scrutineering then compete in a three day track endurance race. Teams aim to complete as many laps as possible during the designated driving hours each day. Energy management is important as teams have limited solar charging time in the morning and evening each day.

# FORMULA SUN GRAND PRIX An Innovators Educational Foundation Event



Coming to the Circuit of The Americas in 2013 June 24-26: Scrutineering | June 27-29: Raycing



www.americansolarchallenge.org

## **HOW FSGP WORKS**

#### SCRUTINEERING

Experienced staff inspect each solar car, checking mechanical, electrical, and battery protection systems. Drivers are ballasted and required to pass vision and egress tests. After clearing the static inspections, teams move to dynamics, a series of tests that demonstrate the capabilities of the car and the drivers. These include a typical U-turn, timed figure-8, wet pavement braking, and slalom tests. Only teams which successfully pass all inspections are permitted to compete on the track.

### RAYCING

All solar cars begin with a full battery pack for a mass start. For the next eight hours, the cars do laps around a road course track, coming into the pit for driver changes, tire changes, and other maintenance as needed. At the end of the day, teams are given time to charge their batteries by pointing their solar arrays towards the setting sun before impounding their batteries for the night.

The next morning, teams get their batteries from impound and have a morning charging time before lining up again on the start line. After three days on the track, the team logging the most laps is declared the winner. Winning is often a combination of a good energy management strategy, efficient driving, a well-trained pit crew, and a reliable solar car.



# INTERESTED? GET INVOLVED.

### SEE

All of our solar car events are free and open to the public. We invite you to come see the solar cars, meet the teams, and witness the sport firsthand! Bring your camera!

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### SPONSOR

Whether corporate or individual donations, your support is greatly appreciated! We would be glad to discuss current needs and opportunities with you.

## PARTICIPATE

We welcome students from all universities to participate in this multi-disciplined learning experience. As the veteran teams know, it is about much more than just building a car!

## **ABOUT US**

Innovators Educational Foundation is a 501(c)(3) non-profit organization that hosts solar car challenge events, specifically Formula Sun Grand Prix and the American Solar Challenge. These team events celebrate engineering excellence and promote the use of renewable sources of energy. A core group of dedicated volunteers, mostly former competitors, serve as the event officials, reviewing design reports, performing inspections, and running the events.

