# **Donation Packages**

# Team Owner: \$2000+

- In addition to all of the benefits of other packages
- Most visible representation on vehicle
- Meeting with the team

### Crew Chief: \$1000-\$2000

- Prominent representation on vehicle and website
- Progress updates from the team
- Appreciation Plaque Pit-Crew: \$500-\$1000
- Decal on vehicle and website
- Appreciation Plaque

## Fan: \$500 and under

• Representation on website

Some of the costs the team anticipates for this year:

Drivetrain	
-2 CBR engines	\$1200
-intake and exhast	\$2200
Suspension	
-Shocks and springs	\$1240
-Raw material for	
uprights, rotors etc.	\$1446
Frame	
-Steel Tubing	\$725
-Fiberglass and Paint	\$600

# Join the Team

Participating in the Formula SAE competition can be expensive as well as time intensive. The team currently has a small allotted budget but still needs funding in order to purchase many of the necessary racing components, materials, shop tools and entry fee for competition.

This project has been an important part of the development of 165 Bradley mechanical engineering students over the past fourteen years. If only half of these graduates were to donate \$100 it would completely pay the team's budget

# **Contact Us!**

### Faculty Advisor:

Dr. Martin Morris 310 Jobst Hall 1501 W. Bradley Ave. Peoria, IL 61625 309-677-2717 mjmorris@bumail.bradley.edu

#### **Team Captains**

Suspension: Curtis Bracket cbrackett@mail.bradley.edu Drive train: Steve Brodkin sbrodkin@mail.bradley.edu Frame: Kyle Mulligan kmulligan@mail.bradley.edu





# Formula SAE Senior Design Project



# 2010-2011 Teams

The Society of Automotive Engineers (SAE), an international organization hosts an annual collegiate design competition in which students must design and build an open wheel racer. Teams participating in this competition must meet stringent design criteria and safety regulations. Cars will be judged in events that will test the car's acceleration, aesthetics, braking, endurance, fuel economy, and more. Also judged is how well the team conforms to its budget.

Bradley University incorporates the competition into the Mechanical Engineering curriculum through its senior design projects. The project is divided into three teams: frame, drive train, and suspension/controls. While each team has its own discipline they will have to work together to build Bradley's car from the ground up.

### More information available at:

#### http://cegt401.bradley.edu/projects/2010-2011/ FSAE/

Or through Bradley's homepage at Bradley.edu

### Engine And Drivetrain

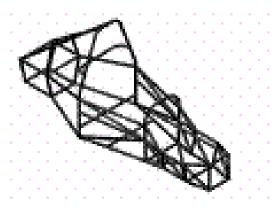
The Engine-Drivetrain team aims to upgrade the engine this year. The team will use a Continuously Variable Transmission (CVT) to eliminate the need for shifting. The aim is to buy a sport bike or snowmobile engine within 610cc. As a result, the designs of the exhaust, intake, and axels will change. Some fabricated parts will be made from carbon fiber to save weight.



# **Suspension and Controls**

The Suspension and Controls team will design a suspension and braking system that meets FSAE team needs and the competition rules. This team is responsible for

- Shocks and springs
- Brakes and Calipers
- Wheels and Tire
- Suspension Members



# Frame and Ergonomics Team

The Frame and Ergonomics Team will produce a frame that functions as a strong foundation for the other teams to work with. The frame must fit all team members, be safe, and be rigid, while maintaining light weight. The team plans to use space frame construction to keep the car as small as possible. The team will also construct a fuel cell, driver seat, firewall and an exterior body.

