



Ready



Set



Go

A Race Against Time

Lehigh's SAE Formula Team

By Austin Katz

"It was one of those nights, it was an all nighter and I hadn't seen my roommate in about week because I was spending every single moment out of class in the shop. I had stepped out of the shop at 6 a.m. that morning and the sun was stating to rise. And I got back to my room and I saw my him for the first time in a week and he goes to me and says, 'Where the hell have you been?' And I'm like that's a really good question," said Engine and Drivetrain designer Randy Cheung.

This is a typical moment for members of Lehigh's Formula Society of Automotive Engineers team.

The team is made up of approximately 30 undergraduate students, who all share two goals: To build the race car with the greatest construction, performance, design and cost,

and to win during The Society of Automotive Engineers' yearly competition.

"It allows me to be a part of a team and accomplish something much bigger than I could on my own," team captain Chris Johns said.

Each year a new race car is built and designed completely from the ground up and tested by the team members. The club does all this outside of their headquarters at Mohler Laboratory and Packard Laboratory. Team members do not receive class credit or money but do it because they all love cars.

The club requires members to learn all about each part of the car to make sure that it is up and running in time. Johns said the older members of the team teach the members tech-

niques but, overall most of the learning is done independently.

"I am able to get incredible experience that I wouldn't be able to get. I haven't even started real engineering courses yet, I am already designing stuff for the team that will ultimately be used," pedals designer Jacob Matus said.

Lehigh has been competing in the race since 1993.

The whole competition takes place across three days in which every aspect of the car is judged. The first two days, the car is placed through Statics events in which includes design inspection, cost of building the car, and acceleration. The last day cars a put through Dynamic events which are more based upon the car's performance which include, acceleration, endurance and fuel efficiency.

Judges are experts in the automotive and aerospace industries.

The competition is particularly exciting for upperclassmen as they have the opportunity to network with different companies for potential jobs.

“Quite a lot of people have gotten jobs in the past although the connections they made at the competition,” Johns said.

Students from all disciplines are welcome to join the club. Brake designer Becky White said she started out as a history major before finding her passion for mechanical engineering.

Even though big name companies such as, Exxon Mobile, Boeing and Airtech sponsor



the team, it only covers a fraction of the cost to finish the car.

“If we don’t have money we can’t buy a car. We build a car on extremely low budget that varies from year to year. We have to have money to buy materials, new tools, to go to competition which we pay for ourselves,” White said.

The team currently has a page on Ignite LU, a fundraising site specifically for Lehigh student-run initiatives, and as of this article, has raised over \$7,100 of their \$20,000 goal.

Production for this year’s car is well underway and Cheung is optimistic about the competition.

He said, “I have hopes for this car. We tried to do cool stuff in the past that was not executed well. The main goal of this car is to do what we know how to do well, and do it the best we can.”

Matus said he is looking forward to seeing the years’ worth of designing manufacturing and refining coming together. This year’s competition, will be held on May 10-13.

