Who are you calling a nerd? 
Project hopes to encourage girls in engineering

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"You're an engineer? Ha, more like an engiNERD." Tufts' engineering sect has long been stereotyped as hard-working, intelligent, and yes, slightly nerdy individuals. In addition, these labels also usually assume the student in question is male - men have traditionally dominated the field of engineering, with few women reaching top ranks or even pursuing the course of study during their undergraduate years.

Dr. Karen Panetta, an associate professor of electrical engineering and computer science, hopes to change these negative stereotypes. She has started "Nerd Girls," a women in engineering project that takes much of its conception from The Real World series on MTV.

The program aims to show the intimate lives of undergraduate women in engineering. The focus will be on their creation of a solar car, but the background will show their lives outside of the classroom. With one student ranked number five in collegiate tennis, and another dancing the lead in The Nutcracker, Panetta thinks she will have little difficulty conveying the women's diverse interests. They are anything but nerds - in her eyes, the program's name is slightly tongue-in-cheek.

The documentary will officially be called Nerd Girls: Breaking the Stigmas and Stereotypes of Women in Engineering. Several preparatory moves have already been taken: a web site is in the works and two electrical cars are already scheduled to come to Tufts. Several students are already involved in areas from production to modeling.

"This showcases engineering, but also utilizes many different fields," Panetta says. "It involves modeling, film crews, production and editing, all by students at Tufts. It's a nice project."

Panetta's motivation for this program or one like it initially comes from her days as an undergraduate. With no women in engineering, she did not have a strong support system. She sees little difference today. "That should have changed by now," she says.

With this documentary, she hopes to expand the appeal of engineering to women who may have never even considered that a viable option. "A lot of women go into computer science, but I don't know what keeps them from going into engineering," she said.

Panetta feels that many young women feel the need to "dumb themselves down" as they don't want to appear to be "nerds." She believes that if women see models of engineers who are also athletes, beautiful, and smart, it could have far-reaching effects.

"Suddenly these [characteristics attributed to engineers] won't be holding them back," she said. "It's no longer a negative thing."

One large audience Nerd Girls hopes to reach is young girls. After the completion of the documentary, Panetta plans to drive down the East Coast in an electric car built by Nerd Girls to talk to young children about engineering.

Although Panetta compares the documentary to shows such as The Real World and Pop Stars in concept, she had far different goals than they do. On Pop Stars she sees girls crying because they are not the best singers or actresses. She wants to promote education and other paths to success besides entertainment, an aspect she does not see the reality shows focus on.

Senior Nannette Martinez, the first multimedia major graduating from the Multimedia Arts program, agrees that the program lives up to its name. "I think it really breaks down the stigmas and stereotypes of women in engineering," she says. "It won't be like the other shows that are reality-based," she says. "It won't just show women going around doing what other women want to do."

In addition, the far-reaching scope of television will only be a bonus. "We will get a broad and diverse audience," she said. "You don't have to be rich to watch television. Therefore, we will have access to a wider, broader, much more diverse audience."

Panetta explains that the project would not have been possible without the support she has received from Dean of Engineering Ioannis Miaoulis, a strong proponent of programs for women. "He has been instrumental in supporting us," she says.

The Experimental College's Howard Woolf and Dr. Steve Morrison of the Electrical Engineering and Computer Science Departments have co-directed the program and documentary with Panetta, the first film/major project to come out of the Multimedia Arts program.

Despite all it encompasses, the program has a simple message, according to Panetta.

"Through motivation and determination, you can aspire to be anything you want," she said. "That's the American dream. That's our goal."