Teachers meet at SUMMIT - July 20, 2007

Twenty teachers from all over New York State converged on Poly this week for a four-week program designed to make them better able to teach engineers of the future.

Providing them with the technical competency they need to integrate engineering concepts into their curricula is the goal of the program, the Summer Mechatronics Institute for Teachers, or SUMMIT.

Starting on July 16 and continuing until Aug. 10, the 20 teachers receive instruction and mentoring in hands-on engineering design. In the first two weeks, they will be introduced to the multidisciplinary field of mechatronics through guided training that includes discussions and tutorials. The next two weeks are devoted to team-based engineering design projects.

To receive their full $6,000 stipends, the teachers must attend all scheduled activities, complete their projects, and conduct follow-up activities such as assessing and reporting the impact of the projects in their classrooms.

“SUMMIT empowers teachers by providing them with the technical background they need to implement more science- and engineering-focused lessons in the classroom,” said Vikram Kapila, associate professor of mechanical engineering, who leads the program in collaboration with Noel Kriftcher, executive director of the David Packard Center for Technology and Educational Alliances.

Kapila hopes that, by implementing these teaching techniques, the teachers will look to Poly to help them create engineering-based courses that will be the equivalent of certain college-level courses.

He points to a program at Brooklyn’s Midwood High School, where a four-year robotic academy was proposed by two alumni of a previous National Science Foundation-funded Research Experience for Teachers site project. Using the knowledge they gained by participating in the program, the two teachers obtained a $300,000 grant from their school district to start the academy. Students who satisfactorily complete two years of the program will receive four credits toward Poly’s “Introduction to Engineering” course.