

Study Abroad: Finding Nano

For McCormick senior Kyle Liske, the best part of the Finding Nano study abroad program in Germany was the BMW factory tour. And the sightseeing. And the friendships.

“Now most of my friends are French or German, with a few from Austria, Bulgaria, and Brazil,” he says, reporting by email from his internship in Munich. “The program is more than the classes that you take. It’s a whole cultural experience.”

The six-week summer program offered by Technische Universität München (TUM) gives students a chance to earn credits by taking a course called Electronic Properties of Nanoengineered Materials as well as a technology course that includes visits to nine research technology centers — including labs, start-ups, and major international corporations — to get a feel for German technological culture. Students also take a German language course, live in a dormitory with German students, and visit cultural sites during evening and weekend excursions.

This past summer, 10 students — including four from Northwestern — visited the research laboratories of two German Nobel Prize winners as well as the European patent office, two nanotechnology start-up companies, and other German companies and labs, including Liske’s favorite, the BMW factory in Munich.

“We could see the fully automatic robots that pick up pieces of stamped sheet metal, put them in place, and then weld them together,” he said. “It was amazing.”

The program is an opportunity for engineering and science students to study abroad and earn technical credits — at a cheaper cost-per-credit — without getting out of sync in their required course schedules. Matthew Grayson, assistant professor of electrical engineering and computer science who helped create the program, says it offers students a perspective of how science and technology works in different settings and cultures.

“They get to visit labs and industry, and they get to see what would be fun for them,” he says. “They can picture themselves in these sorts of jobs.”

Of the 10 students that participated, five were citizens of countries other than the United States, including Korea, Singapore, Canada, Ecuador, and Turkey, and their majors ranged from physics to materials science, electrical engineering, chemical engineering, computer science, mechanical engineering, and nanotechnology.

“It gives students a chance to use their technical skills as well as broaden their horizons,” Grayson says.

“It gave me a new way of looking at cultures — they all have their intricacies,” Liske says. “There is just so much variety.”

To earn a full quarter’s worth of credits, students even have the option of staying in Munich to participate in a fall internship. In the fall of 2009, Liske interned at General Electric and worked on photovoltaic modules (solar panels) modules, improving their efficiency to make them more cost competitive with conventional power sources.

Staying in Germany for the internship after the conclusion of Finding Nano has given Liske a taste of the day-to-day aspects of a foreign culture, “but there are always surprises. Like Oktoberfest, or discovering you can’t buy anything anywhere in Germany on religious holidays, or watching the French version of Wheel of Fortune. It’s a great way to diversify your knowledge of the world.”

