THIS PAST SPRING, a group of Penn State engineering students spent a month traveling through China. The goal, according to the syllabus: “To understand the cultural impact of engineering in China.” But for these 27 undergrads, lessons went far deeper.

BY MARY MURPHY
PHOTOGRAPHS BY CURTIS CHAN '94,'03 MA COM
HEN THE GROUP arrived in Beijing, they were jet lagged, anxious, and equipped with only a few basic Chinese phrases. Many of the students had never left the U.S. before—and now, they were embarking on a month-long journey through some of China’s biggest cities as part of Engineering 118.

The 3-credit course, taught by assistant engineering professor Xinli Wu ’11 PhD Eng, was designed to help aspiring engineers understand China’s role in globalization. Now in its sixth year, the course takes students to China’s major sites and engineering projects, including visits to multinational corporations, like Ford’s assembly plant in Changan and Shanghai Minmetals. The trip also included visits to secondary schools and universities, where the Penn Staters learned about the Chinese engineering curriculum. Along the way, the students chronicled their experiences with photos and blog posts.

A month later, as detailed on the class blog, a lot had changed: The students became skilled hagglers at street markets; they bonded with Chinese high schoolers over homework and ping-pong; they learned to navigate public transportation and mastered the art of eating with chopsticks. For these aspiring engineers, a month in China was more than educational—it was transformative.

STEEP THOUGHTS: The students wasted no time when they arrived in Beijing. On their first day in the city, they explored the pedestrian market on Wangfujing Street and then headed for the Great Wall (above). “We climbed three or four miles up some of the steepest steps you could imagine,” wrote student Will Haunstein. At the top, he said, they snapped a few “soon-to-be Facebook profile pics.”

COMPARING NOTES: At a secondary school in Huangshan, the group learned that Chinese high schools are similar to boarding schools in the U.S., where students live in dorms away from home. The Chinese students were eager to practice their English, and Lola Buonomo helped by writing a message in a student’s notebook (below).
TIME TO EXPLORE: In Xi’an (bottom photo), the students rented bicycles to get an up-close look at the city’s ancient walls, built during the Ming dynasty in 1370.

“IT WAS AN EXPERIENCE THAT REALLY HASN’T SUNK IN YET... IT’S INCREDIBLE TO ME THAT I CLIMBED ONE OF THE WONDERS OF THE WORLD.” —WILL HAUNSTEIN
PLANTING IDEAS: In Chongqing (right), the group visited the Changan Ford production plant, where they were met by Changan Ford CEO Marin Burela. “He left us with a very inspirational speech about never being afraid of failure,” wrote Lola Buonomo, “and to live our lives with no regrets.”

“I’M EXCITED TO SEE WHAT NEW ADVENTURES WE UNDERTAKE TO ADD TO THIS CHAPTER OF MY LIFE.”
— LOLA BUONOMO
ANCIENT WONDER:
The next stop was Lintong, where students visited Emperor Qin Shi Huang’s mausoleum, home to the Terracotta Army (above). The sculptures portraying the soldiers of China’s first emperor, Qin Shi Huang, were discovered in 1974 and date back to the late third century.

"THE AMOUNT OF DETAIL THAT WAS CRAFTED INTO THE EMPEROR’S GUARDS WAS JAW-DROPPING."
— PAUL PERREAULT
WATER WORKS: From Xi’an, the group traveled to Yichang to see the Three Gorges Dam (above). The massive source of renewable power is the largest hydroelectric project in the world. Navigating through a series of five ship locks over the course of three hours, the students learned how the vertical locks—essentially a large-scale ship elevator—increase the river’s freight capacity, and how their construction allows the locks to withstand huge amounts of water pressure.

GORGES VIEWS: The students got an awe-inspiring view of the gorges surrounding the Yangtze on a river cruise.

“I NEVER DID GET USED TO THE BREATHTAKING VIEWS WE EXPERIENCED ALONG THE CRUISE.”
—CAROLINE DEAKINS
LOCAL FLAVOR:
The students wrote extensively about their experience with traditional Chinese cuisine—pork dumplings were a favorite, while the reviews on scorpion were mixed. “One dish was a fish whose directly translated name was ‘smelly fish,’” wrote Kate Waskow. “And, boy, did it live up to its name.”

“NOW THAT THE TRIP HAS COME TO A CLOSE, WE ARE NOT 30 STRANGERS, BUT 30 BEST FRIENDS.”
—LOLA BUONOMO AND CAROLINE DEAKINS

MOOD LIGHTING: The group spent a day at Beijing University of Posts and Telecommunications, a science and technology school in China’s capital. In the university’s “Innovation Camp,” the students explored robotics displays and demonstrations, like the “mood chair” (above), with LED lights that shift to match the occupant’s mood.

TIGHT BOND: “It’s crazy to think that three and a half weeks ago we were a group of 30 strangers,” wrote Lola Buonomo and Caroline Deakins in their final blog post of the trip. Part of the bonding experience: sharing Penn State pride whenever possible, like flashing THON’s Four Diamonds in Shanghai.