At 51, Lori Atwater is earning an engineering degree she hopes will help her change the world.

The goal of the trip was to learn about Arab culture and language, explore the changing roles of women in the Arabian Gulf, and identify projects on which Cal Poly students can collaborate with international student partners.

Along those lines, she said the interdisciplinary, hands-on opportunities at Cal Poly are inviolable. "They’re real-world adventures with social science, biology, finance and engineering."

Part of the pain of returning to school was realizing what a perfect fit engineering had been for her 30 years earlier, she said. Then again, her life experience has equipped her to take a more proactive role in her education, engaging professors in the classroom and creating opportunities that enhance her studies.

"This really is the best time," she said. "I never would have gotten as much out of the experience as I’m getting right now."
The Mother of four grown children, Lori Atwater had been successful as a union electrician, an information systems manager and self-employed technical consultant. But she traded it all in for dorm life and a meal plan.

At age 51, Atwater is a full-time resident of Poly Canyon Village, pursuing an engineering degree she abandoned 30 years earlier. At the time, as a young wife and mother, she thought that investing in her husband's degree would be enough. But she yearned for something more.

So she volunteered to join a single overseas aid mission with Mountainbrook Community Church in 2005 but it became a calling. In that year, Atwater traveled to Thailand and Indonesia to rebuild houses after a tsunami ravaged the area. She also journeyed to Malawi, one of the 10 poorest countries in the world, to help develop a subsistence church. The group encouraged her to “live the life you’re wired for,” said Thom O’leary, the lead pastor. “Lori began to see the bigger scope of how she could make a difference in the world.”

As she continued her travels, she recognized the gap between emergency response and the effort it really takes for sustainable international development and ultimately, her decision to return to school.

“It was a long, painful process to come back to school,” she said. “There is a stark contrast between myself and the other students so it can be hard to relate to each other.”

But she walked away from a comfortable income, a company car and other trappings associated with success because she didn’t want money to drive her decisions. “You have to be true to your gifts,” she said.

Since returning to school, she has gone global with Cal Poly’s learn-by-doing philosophy. Last year, she was part of a team that took a bicycle-powered water pump to Malawi to help villagers become self-sufficient. She said it’s important to design “for the planet” — places where the population doesn’t have technical training and where clean-rooms don’t exist.

“That presents interesting design challenges.”

The goal of the trip was to learn about Arab culture and language, explore the changing roles of women in the Arabian Gulf, and identify projects on which Cal Poly students can collaborate with international student partners.

Along those lines, she said the interdisciplinary, hands-on opportunities at Cal Poly are invaluable, “They’re real-world adventures with social science, biology, finance and engineering.”

Part of the pain of returning to school was realizing what a perfect fit engineering had been for her 30 years earlier, she said. Then again, her life experience has equipped her to take a more proactive role in her education, engaging professors in the classroom and creating opportunities that enhance her studies.

“This really is the best time,” she said. “I never would have gotten as much out of the experience as I’m getting right now.”