At first it was a bit intimidating. Caltech, after all, was ranked as the nation's top physics graduate program in 1999, the same year Ted Corcovilos graduated from Tennessee and set out for Pasadena.

"It was a big adjustment from UT," he said. "The first couple of years were pretty rigorous."

Having earned a bachelors degree through UT's College Scholars program (emphasis on physics and math), Ted was certainly accustomed to hard academic labor, but he didn't particularly enjoy "having to spend hours and hours on homework," he said. Fortunately the physics department at UT had prepared him well.

"I think I had all the class work I needed," he said, "so mostly it was just the pace I had to get used to."

Caltech's physics department had an impressive list of entering graduate students in the fall of 1999. Harvard, Cornell, Stanford, MIT, Oxford and Princeton were all represented. But as Ted points outs, a physics background at Tennessee proved just as valuable.

"Once I got into the classroom, I realized, 'I know as much as these guys,'" he said. "There were some respects where I was kind of ahead."

He explained that taking a couple of graduate-level courses his senior year at Tennessee helped prepare him for life in graduate school. He also racked up quite a bit of research experience as an undergraduate, including work on the PHENIX project with Dr. Soren Sorensen and Project SEE (Satellite Energy Exchange) with Dr. Al Sanders.

"He's the best student I've ever had or hope to have," said Dr. Sanders. "He's the only freshmen I've ever known who thinks like a graduate student."

With two years of graduate work now behind him, Ted is settling into his Ph.D. research in experimental condensed matter. He finished his qualifying exams this summer and has completed all required classes. Sponsored by a NASA Graduate Student Research Fellowship, he's working in the lab full-time, taking a couple of classes suggested to him by his adviser, Dr. Nai-Chang Yeh, whose specialty is superconductors.

"I'm kind of the black sheep in the group," he said, since after shopping around for
experimental projects he decided on measuring the density of helium near the Lamba transition (where liquid helium goes into a super-fluid state). He uses cryogenic, microwave and ultra-high vacuum equipment. He is also writing control and analysis software. He's pretty much a one-man show on the project, although Dr. Donald Strayer from the NASA Jet Propulsion Laboratory does help out regularly.

Ted said he has about three years left before he finishes his doctorate, which gives him plenty of time to enjoy his surroundings.

"Pasadena's a beautiful town," he said. It's the city of roses, which you can tell just by walking down the street."

When he can escape the lab, he manages trips to the beach or takes in the opera or an L.A. Dodgers baseball game. Pasadena's natural wonders are also an attractive respite for the Maryville native.

"There's lots of good hiking and camping in the area," he said, "but I do miss the mountains back home."

He also catches UT's gridiron warriors regularly with fellow UT graduate Neal Oldham, now a materials science graduate student at Caltech.

Once his graduate work is finished, Ted is clear about what he wants to do professionally.

"I definitely want to teach," he said. "That's been the goal all along."

He said he would like, ideally, to teach at a state university, not unlike his alma mater in Knoxville.