UC SANTA BARBARA
THE Current

December 3, 2025
Cameron Walker

UCSB engineering students get a management edge with new program

One recent evening, a group of fourth-year engineering students at UC Santa Barbara gathered on campus to meet with Kelsey Judd, an alum who is now a program manager at the Santa Barbara office of Redwire Space. After Judd described his journey from electrical engineering undergrad to his current management role at the company, which provides material and logistical support for space missions, the students discussed their own interests and received advice about navigating their careers.

The event helped to launch this inaugural cohort of UCSB's brand-new Engineering + Technology Management (E+TM) Fellows Program, which offers undergraduate engineering students guaranteed admission and a graduate fellowship to the Master of Technology Management (MTM) program, as well as senior-year support that adds management and entrepreneurial skills to their technical training.

The program's initial eight undergraduates will spend this year participating in additional meetings with alumni and industry partners and site visits to local companies, all intended to introduce them to potential career paths and provide networking opportunities. They will also attend E+TM sessions focused on interview skills, team building and communication before starting the MTM program in 2026.

"Engineering today requires not just technical skill, but also the ability to communicate, to work in teams, and to lead others in creating technology that will

shape the future," said Umesh Mishra, dean of The Robert Mehrabian College of Engineering. "UCSB's new E+TM program allows our students to develop those skills while making connections with mentors, industry professionals and their colleagues, thus providing a network of knowledge and support that can enhance both their careers and their lives."

A bridge between engineering and business

The E+TM initiative, part of the Department of Technology Management, was designed to meet a long-recognized need. While many engineering students would like to round out their education by learning about business topics, they have often found it difficult to pursue business courses or the department's undergraduate certificate program due to heavy courseloads.

"MTM is already an accelerated path, condensing two years of coursework and field experience into one," said Erin Nerstad, executive director of the MTM program. For interested engineering students, she added, starting some of the business-focused activities during senior year through E+TM "creates an opportunity for parallel programming and engagement, training and upskilling, without overloading their schedules."

The E+TM program allows students — many of whom have minimal experience in business settings — to see the places where their engineering background can take them, sooner. "We help students think through what aligns with their skills and interests, so that they can be really thoughtful and strategic when they are on the job market, focusing on building a network and targeting specific roles," Nerstad said. "Because of that, our MTM alumni have a lot of success coming out of the program."

Following your own path

When electrical engineering student Tishya Chauhan's roommates encouraged her to take a technology management course as a junior, she had already been thinking that she wanted a change. She'd pursued electrical engineering because it seemed like a stable, interesting career, but, she said, "this was supposed to be my calling, and I wasn't feeling called."

After her first TM course, she realized that adding "soft skills" to her engineering degree was more aligned with her interests. "I thrive on human interaction,"

Chauhan said. “Technology management gave me that avenue to work with people while making an impact in tech.”

Now in her fourth year, Chauhan said the program has already given her a boost. “They’re helping you prepare for the master’s a year in advance,” she said. “I’m really excited about the networking opportunities and the chance to practice talking with people in a professional capacity. A lot of engineers don’t get to practice these skills before they start applying for jobs.”

The E+TM program provides these skills efficiently by streamlining both the timeline and the spring fellows program application process, which requires a brief personal statement, a resume and a UCSB transcript — significantly more straightforward than most graduate fellowship program applications.

Fourth-year computer engineering student Lily Chen came to UCSB intending to get engineering undergraduate and graduate degrees. She planned to work in industry as an engineer, and then to grow into management before eventually becoming an entrepreneur, like her father. She thought she needed an MBA in order to develop the business acumen for that path. “Hearing about this program changed my mind,” she said. “I thought, ‘Why don’t I just start now?”

Training in teamwork

Guest speakers like Judd bring the connection between disciplines to life. He credits his combined engineering and MTM background with his success at Redwire Space. “The problem-solving skills and methods from engineering — I use those daily,” he said. “And being able to work with teams, manage deadlines, and understand risk management makes you a better engineer and a better leader.”

A recent session for the fellows with UCSB Career Services also emphasized teamwork and communication — essential skills that the students will continue to develop during their fifth year.

“The number one thing the career services expert said she hears from people who recruit and hire engineering students is that they need teamworking skills,” Nerstad said.

Teamwork will be woven into the E+TM experience, with even more opportunities during the MTM year, including a course called “Leading Technical Teams” and a

hands-on field project, in which teams of five students act as consultants for local tech companies, working on real problems the companies are facing.

Convinced by communication

John Hagedorn, a fourth-year computer engineering student, hopes to work in project management after a few years as an engineer. He thinks the E+TM program will accelerate his shift into management roles.

Seeing the program in action during a recent tour of Amazon sealed the deal. The E+TM students joined a group of MTM students touring the facility, and the current graduate students “were so articulate and passionate about their work and what they wanted to pursue,” Hagedorn said. “You want to work with these people who can communicate their ideas in a compelling way.”

Media Contact
Shelly Leachman
Editorial Director
(805) 893-2191
sleachman@ucsb.edu

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.