Gus Ordoñez remembers his time at Columbia as a workout—for his body and his brain. Climbing the stairs in Mudd and Fairchild halls between Mechanical, Civil, and Biomedical Engineering gave him the opportunity to get a little exercise and it also set the stage for his eventual climb to managing director of an S&P 500 company.

As a graduate student, Ordoñez studied a problem involving low-speed aerodynamics that required advice from professors in all three departments. He also built the School’s first low-speed wind tunnel in the basement of Mudd so that he could examine airflow over butterfly wings and other structures.

“I had to connect a lot of dots and rely on the full breadth of my engineering knowledge to be successful,” said Ordoñez. “It gave me the ability to learn from all different people. It also opened up my mind to other disciplines that engineers can apply their knowledge to.”

After graduation, Ordoñez went on to a career with a series of defense companies, including Northrop-Grumman, where he worked on the flight test program for the B-2 Stealth Bomber, and Honeywell, where he captured the first mini-robotic reconnaissance drone contract that is now used in Iraq. He also managed Plastek, a company that manufactures a chemical compound used to restore clarity to pitted and scratched cockpit canopies.

Today, Ordoñez finds himself doing more general management than project management as the managing director of the Defense Enterprise at Hamilton Sundstrand Corporation, a part of United Technologies, where he oversees the company’s operations, building and developing products ranging from biological and chemical detectors to cryogenic tanks for rockets. But he still traces his success scaling the corporate ladder back to all those years climbing.

“Innovation and creation come from being able to connect as many dots as possible,” said Ordoñez. “Whether it’s a widget or software or anything, you still have to go back to the fundamentals of engineering to make it work.”