NJIT’s Makerspace will be at the core of the new School of Applied Engineering and Technology within Newark College of Engineering.
NJIT Establishes New School of Applied Engineering and Technology

An array of more than 100 technology-focused engineers, device designers and project managers, joined by NJIT Alumni and elected officials, gathered on campus Nov. 9, 2018, to mark the establishment of NJIT’s School of Applied Engineering and Technology (SAET) within the university’s Newark College of Engineering.
Designed to meet spiraling demand in the job market for applied engineering technologists in industries reliant upon production, manufacturing, process control and instrumentation, the new school will emphasize internships, co-ops and apprenticeships within private industry and government. When fully implemented, SAET will serve close to 2,000 students and will have roughly 30 full-time instructors and faculty members, as well as approximately 100 auxiliary faculty and adjunct professors from industry.

With its industrial-grade machines, NJIT’s Makerspace will be at the core of the program.

“This space, much more than the classroom or the standard lecture hall, is the natural environment for students like us; future engineers and technologists,” said Amelia Sapirman ‘18, a senior majoring in Mechanical Engineering Technology. “This is a place where you can design, experiment, build, measure, test, recalibrate and redesign until you achieve what you and your team set out to do.”

The School of Applied Engineering and Technology will include 10 baccalaureate degree programs in engineering technology, including Mechanical Engineering Technology, Electrical Engineering Technology, Manufacturing Engineering Technology, Construction Management Technology and Concrete Industry Management. The new school will be home to a four-year General Engineering program culminating with a Bachelor of Science degree.

NJIT’s concrete program, one of only four in the country, already incorporates many of the new school’s core principles, including mandatory internships. Throughout the year, students travel around the country to competitions and industry conferences, such as the World of Concrete conference in January which annually attracts more than 65,000.

**ANALYTICALLY ADVANCED**

“NJIT Engineering Technology programs are already known in the community and
industry as some of the most analytically advanced, and what is being done here will also make them known as the most sophisticated in terms of access to advanced machinery and modern gear, and superior in preparing students for leadership in industry and governmental facilities,” said Sapirman, who spent last semester working in the Disney College Program in Orlando.

Sapirman said she switched her major from Mechanical Engineering to MET during her sophomore year because she “wanted to be the person physically making or working on the machines that I was learning about, not the person analyzing their structures.”

“Some highlights of my experiences within MET are the countless number of design classes that have been offered to me. I have learned how to use Creo, Solidworks, Inventor as well as others and have enjoyed each one. This design background has already set me apart from some of the other applicants in jobs that I have applied for,” she added. “With the amount of design software work I have received throughout my years here at NJIT I am confident that I could go into any machine design job I wish to pursue.”

**LINKING INDUSTRY AND HIGHER EDUCATION**

NJIT President Joel Bloom, who was joined by members of several of NJIT’s governance boards, called the new school a boon to both job-seeking students and the employers who need them.

“In recent years, I’ve spent a great deal of time in conversation with industry leaders who have made it clear that they need more NJIT graduates for their enterprises, but not just engineers,” Bloom said. “There is an abundant demand for professionals who possess hands-on experience as well as a solid technical background in manufacturing, fabrication, maintenance and service that enables them to focus on practical applications of engineered products and processes.”

As the official opening of NJIT’s new SAET were, from left, NJIT Provost Fred Deek ’85, ’86, ’97, Senator Paul Sarlo ’92, ’95, Stephen P DePalma ’72, NJIT President Joel S. Bloom, Robert C. Cohen ’63, ’84, ’93, Amelia Sapirman ’18, and Newark College of Engineering Dean Mooha Kam.

The new school dovetails, he added, with the emphasis New Jersey Governor Phil Murphy is placing on apprenticeship.

On his first day back from a trip to Germany and Israel, the governor announced a $4.5 million apprenticeship grant program supporting the state’s high-demand industries.

“As a state, we do well to invest in higher education. We do particularly well when our educational investments help link industry and higher education,” said Paul Sarlo ’92, ’95, the deputy majority leader of the New Jersey Senate. “This school is a step in the right direction.”

*Author: Tracey L. Regan is an NJIT Magazine contributing writer.*

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