

Urbahn and PC Construction Break Ground on \$14 Million SUNY New Paltz Project

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SUNY New Paltz Engineering Building Ground Breaking

New Paltz, NY The State University of New York (SUNY) at New Paltz president Donald Christian, SUNY chancellor Kristina Johnson, elected officials, Urbahn Architects, and PC Construction have broken ground for the \$14 million, 19,500 s/f Engineering Innovation Hub (EIH) building. The new, two-story campus structure will enhance SUNY New Paltz's growing mechanical engineering program, house the headquarters and laboratories of the University's Hudson Valley Advanced Manufacturing Center (HVAMC), provide space for potential business partners under the state's START-UP NY program, and serve as a business incubator for technology and engineering startups in the mid-Hudson Valley.

The new building was made possible by Governor Andrew Cuomo's NYSUNY2020 Challenge Grant competition, in which SUNY New Paltz was awarded \$10 million for its plans to improve economic development in NYS through its educational and research programs. The university also received \$1 million through the governor's Mid-Hudson Regional

Economic Development Council's annual Consolidated Funding Application.

Christian led the groundbreaking ceremony. He was accompanied by campus and external partners, including School of Science and Engineering dean and HVAMC director Daniel Freedman; Johnson; Urbahn Architects' principal-in-charge Natale Barranco, AIA, LEED AP, associate principal Ranabir Sengupta, AIA, LEED AP, and project manager and senior associate Nandini Sengupta, LEED AP; and PC Construction's regional manager and construction executive Edward Kellogg, senior project manager Lowell Short, and superintendent Scott Greenland.

"The new Engineering Innovation Hub will help support and diversify the college's engineering programs and address a critical shortage in engineers needed to serve advanced manufacturing interests in the region. The College extends its deepest thanks to Governor Cuomo and his team for recognizing the value of this project and its educational and

economic benefits for the Hudson Valley region. We also thank the design team of Urbahn Architects, general contractor PC Construction, and other partners for their support that has allowed us to celebrate today's milestone," said Christian.

Barranco said, "The \$14 million, 19,500 s/f Innovation Hub will house faculty research and teaching labs, and a state-of-the-art 3D print prototyping lab to support the engineering program and the work of companies partnering with SUNY New Paltz and HVAMC. The building is designed to meet a LEED Silver sustainability certification."

"The Engineering Innovation Hub will significantly aid SUNY New Paltz in educating engineering students who will provide technological leadership in the Hudson Valley. It will also assist the wide variety of regional companies that make use of our state-of-the-art 3D printing technology and expert staff," said Dean Daniel Freedman.

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HVAMC, which has been providing education, guidance, CAD design, advice on materials used for additive manufacturing, and 3D printing services to SUNY New Paltz students and educators as well as to entrepreneurs and businesses since 2013, will operate a laboratory and offices in the new building. The HVAMC's collection of 3D printers constitutes some of the most advanced technology at any academic laboratory in the United States.

The building site, within SUNY New Paltz's main campus, is a former parking lot located near the existing engineering building, Resnick Hall. Urbahn has designed the Engineering Innovation Hub to allow for a potential expansion to the east if the program's growth requires more space in the future.

"The site of the new building is centrally located on campus, requiring strict construction safety and logistics protocols to ensure the welfare of workers, students, faculty, and visitors," said Kellogg. "Relying on our team's expertise in LEED certification procedures and the Lean Construction method, we will deliver a highly sustainable and energy efficient facility where engineering students can excel for years to come."

The Hub's project team also includes mechanical and electrical engineer Vanderweil Engineers, plumbing engineer CSA Group, structural engineer Leslie E. Robertson Associates (LERA), LEED consultant YR&G, civil engineer BET Engineering Consultants, landscape designer Edgewater Design, lighting designer Lumen Architecture, and cost estimator Ellana, Inc.

"The steel-frame building with spread footing and a slab-on-grade foundation is designed in a manner that eliminated the need for extensive and costly rock excavation that is typical for construction projects in the Catskill Mountains region," explained Urbahn Architects' Senior Associate Nandini Sengupta, LEED AP. "EIH's ground floor lobby will be wrapped in a glass storefront and glazed curtain wall systems to allow natural light into the area. The lobby will serve as a collaborative space where students can learn outside the classroom setting."

"The highlight of the building's architecture is a cubic form that perches over the entrance plaza. The textured, dark gray cube with a luminous metal soffit and a backdrop of lighter forms announces the building as an important presence on the campus. It relates to neighboring buildings and opens up views to a quad, diagonally opposite to it," said Sengupta. The exterior walls will feature a rainscreen system with high-performance concrete panels in two colors, light and dark gray. The light gray portions will be smooth, while the dark gray sections will feature textured panels. The rainscreen will have a stud backup.

The bright, open, 661 s/f entrance lobby will also serve as a collaborative space for students. It will feature cabinets for the display of 3D-printed artifacts. Counters with computers, lounge-style seating, and whiteboards will allow students to work and collaborate. The lobby will also feature a textured art wall invoking 3D-printed panels with highlights in the school colors of navy blue and orange. The flooring will consist of textured porcelain ceramic tile and the ceiling will be gypsum board. The space will feature ring-like curvilinear LED ceiling light fixtures.

This floor will house incidental seating niches within the hallways and along the windows, allowing students to work in informal ways. The niches will integrate benches, data access, and charging stations. The large, 1,900-square foot teaching lab was designed to invoke industrial aesthetic. It will feature polished-concrete floors and painted steel columns, beams and a metal deck. The HVAMC hub, with the 3D printers, will have the same finishes. Rounding out the first floor will be an 850 s/f machine shop; a post-processing shop for the finishing of 3D-printed objects; and support spaces including offices, mechanical and electrical rooms, and public bathrooms. An elevator with an accompanying lobby will connect the Hub's two floors.