A Crossroads for Innovation: The Transformation of the Center for Engineering Education and Research (CEER)
The Center for Engineering Education and Research (CEER) expansion project will usher in a new era for the College of Engineering. A building will be artfully added to the existing CEER building, more than doubling its overall size and thereby creating a new home for the entire Engineering community. For the first time in decades, all of the College’s faculty and students—now in classrooms and labs across campus—will come together in a single building to teach, learn and discover.

The expansion will elevate every aspect of the College’s mission: the academic and student experience it provides, its research capacity and its ability to help solve some of the world’s most pressing problems. This project will also set in motion key elements of Villanova’s Campus Master Plan, bringing new energy to the heart of campus, while freeing up much-needed classroom space across the University.

In a time of remarkable campus transformation, the CEER expansion will be one of Villanova’s most significant capital projects.
Create a true home for Engineering students and a more dynamic student experience.

By unifying Engineering’s people and spaces in a central building, the expansion will create a crossroads for innovation among faculty and students.

Instructional spaces, labs, gathering spaces and faculty offices will all be integrated. Proximity will open opportunities for informal and formal collaborations. And inviting spaces designed for life beyond the classroom—from the light-filled Learning Commons, to team meeting rooms, to the expanded café—will further enhance the opportunity for collaboration.

Inspire a sense of pride and belonging in students and faculty.

The building, including its public-facing first-floor maker and innovation spaces, labs and displays, will showcase the impressive technology and work that goes on there. Large open spaces will allow students, faculty, alumni and visitors to see cutting-edge teaching and research in action.

Catalyze collaboration across departments.

Research neighborhoods organized around 11 high-impact themes—from Water and Smart Health to Robotics and Biomedical Engineering—will bring faculty and students from different departments together to tackle problems in need of interdisciplinary solutions.

Create spaces designed for active learning—learning that is hands-on, problem-oriented and team-based.

Maker spaces and flexible instruction spaces that can adapt to small discussions and larger lecture formats, labs that can be easily reconfigured to meet evolving needs, and spaces to accommodate group work will facilitate 21st-century engineering education.
Add significantly more lab space, which will fuel research.

The expansion will add 11 flexible laboratory spaces, designed to provide multidisciplinary open laboratories to facilitate creativity around topical areas of research. Increased and cutting-edge research opportunities will attract and retain top faculty and students to discover and innovate, which will enhance Villanova’s reputation as a national research institution.

Create dedicated space for graduate students.

Growing Engineering’s graduate program is a priority. The expansion will create office and communal space for this expanding segment of students. These centrally located spaces will weave doctoral students into the broader College community, enhancing their experience and strengthening the entire academic environment, including undergraduate learning.

Establish a student-centered gathering space.

The Engineering commons study and gathering space, a café and a Student Support Services hub—including a Career Services office—will make this area a beautiful and vibrant crossroads, while enhancing a sense of school identity and stature. This will be a place for our Engineering students and faculty, other members of the Villanova community, prospective students and their families, and other visitors to gather, study and learn.
CEER TRANSFORMATION BY THE NUMBERS

2-story

MAKER SPACE

3

INSTRUMENTED GREEN ROOFS

3-story

GLASS ATRIUM HOUSING THE LEARNING COMMONS

10th

BUILDING ON VILLANOVA UNIVERSITY CAMPUS TO ACHIEVE SILVER LEED CERTIFICATION

11

INTERDISCIPLINARY RESEARCH CLUSTERS GROUPED BY THEME

63%

INCREASE IN OVERALL LAB SPACE

150,000 sq. ft.

IN ADDITIONAL SPACE