Increasing Equity Through Technical Skills Training

The new center is a model for co-locating multiple colleges and private-sector entities to fill employers' growing needs for skilled technicians and restore the regional economy. It is an outgrowth of key efforts between local community colleges and city, county, and state agencies to better support the community's workforce, employers' needs, and the regional economy. It connects low-income residents to accelerated workforce education and apprenticeships, moving them out of poverty and onto pathways to prosperity. Its location on the local community college's downtown campus makes it easily accessible to students, residents, and community partners.

The Center focuses on short-term and accelerated, technology-oriented training programs that place individuals in high-demand jobs within advanced manufacturing, information technology, skilled trades, apprenticeship-related instruction, and professional services. A secondary focus is skilled trades and youth apprenticeship-related instruction. To strengthen the educational pipeline, an early college program model focuses on exposing high school students to advanced smart technologies.

The vision for the Center included creating high-tech spaces that support a variety of Industry 4.0 related programs, credit and noncredit, that match the skills the College measured as being most in demand within the region. The current programming dominates the sixth floor, while the partially renovation fifth floor is a flexible shell space ready for future fit-out and use for industry partners.

The focus of the project was to highlight the labs featuring their equipment and users. The high-tech esthetic was designed to be flexible to accommodate the changing educational programs and keep up with industry advancements. Other design features include an interactive informational welcome center and an interconnecting stair with stepped seating surrounded by a student focused lounge.

By 2027, the Center is expected to train an estimated 2,300 workers and add more than approximately $40 million in economic benefits to the region.

AIA's Framework for Design Excellence

Design for Equitable Communities:

The building, originally one of many that the region's once largest employer owned for its downtown site, sat vacant for decades. The site is highly visible from the nearby highway and adjacent to one of the city's most iconic architectural landmarks. Utilizing vacant floors and repurposing the building into one of the region's only workforce development centers is reminiscent of the former owner's heyday - it celebrates local talent by training and developing community members to spur on local economic growth.

Design for Energy:

Sustainability was incorporated into the design through the selection of healthy materials. Carpet was limited to offices and conference rooms, is fully recyclable through the manufacturer's program, and installed with low VOC adhesives and float tape systems. The highly durable epoxy flooring requires little chemicals to maintain. The design also incorporated all LED lighting, low VOC paints and coatings, carbon neutral CPT and LVT, and PVC-free base and wall coverings.

Design for Wellness:

The building design focuses on occupant health by incorporating healthy finishes and materials. The flooring is durable, long-lasting, was installed under walls for flexibility in the future, and doesn't require chemicals to maintain. The interconnecting star creates synergy between the two floors and encourages walking as opposed to using the elevator.

All exposed ceilings in the labs and corridors have 2" thick sprayed insulation for acoustical control. The bright white ceiling color in the labs increases light reflection. The black ceiling in the corridors visually lowers its height, drawing more attention to the bright white lab space.

Design for Resources:

The high-tech esthetic was designed to be flexible to accommodate the changing educational programs and keep up with industry advancements. Epoxy flooring was installed throughout for low maintenance, durability, longevity, and easy transfer of space from classroom/office to lab. The carpeting installed over epoxy with float method allows for future transitions from classroom to lab space. The high NRC ceiling treatments maintain sound control between open lab and lounge spaces.

Design for Change:

The design team solved the challenging existing two-floor layout by creating a large floor opening with an interconnecting stair. This promotes connection between the two floors, a bridge between the various program spaces, and creates a social and educational multipurpose space. The vibrant ceiling design and acoustical wall coverings and panels along the two-story wall in the atrium highlight the Center's mission and provide an energetic and creative environment for building occupants.

Providing a flexible lab space for the workforce industry was key to the client. Any given year the program could grow or shrink, so the ability to reconfigure the lab spaces is key for success. Providing continuous duct runs that can be modified and utilities such as bus ducts and compressed air throughout the lab space helps with reconfiguration. Continuous flooring below the demising lab partitions allows for reconfiguration without floor patching etc.

The design and layout highlight the lab spaces and minimizes the corridor space, placing the program on display. The space has a high tech look and feel that captures the latest manufacturing trades.

Community Impact

The mission of the Center is to improve the economic well-being of job seekers in the region by providing critical in-demand skills training to meet the growing needs of the advanced manufacturing, energy, computer science, and professional services sectors. The training offered by the state-of-the-art Center provides an accessible and affordable opportunity for equitable meaningful employment to an otherwise underserved population, often left behind. It is helping learners and workers at all levels move into the middle class.

The Center is designed to support a variety of programs and allow for quick modification of the space to meet the specific needs of regional employers. Programs offered at the Center focus on Industry 4.0-related skills in automation, robotics, mechatronics as well as information technology. A secondary focus is skilled trades and youth apprenticeship-related instruction. To strengthen the educational pipeline, an early college program model exposes high school students to advanced smart technologies.

In addition to training new workers, the Center is committed to retraining and upskilling technical middle-skilled workers. Improving existing employees' skills and abilities not only gives them the opportunity for advancement and a competitive salary, but it also helps to fill the skills gap that is in demand by local employers.

A March 2021 survey conducted by the New York State Department of Labor found 48% of New York employers ranked the lack of qualified applicants as their main barriers to hiring. The skills training offered at the Center addresses this skills gap and critical workforce shortage.

The new facility is a model for co-locating multiple colleges and private-sector entities to help fill employers' growing needs for skilled technicians and help restore the regional economy. Local community colleges, universities, local high schools, state agencies, city and county governments, and industry associations have partnered to connect learners to education and support employment through work-based learning opportunities and active job placement.

The new Center aligns with the State's commitment to develop and coordinate effective industry-driven training that provides in-demand skills and direct job placement. The goal for the State's workforce development initiative is to build its labor force from all sides – attract new companies to the region, fill critical work gaps, and give employees technical skills and opportunities for gainful employment.

The world-class training center is acting as a catalyst for the region's economic growth by:

- Giving employers access to a workforce that is well-trained in smart technologies.
- Increasing equity by offering accessible and affordable skills training that will lead to gainful employment and upward movement.
- Making the region an attractive option for new businesses by creating a large pool of skilled workers.

Site Plan

Image Credit: Designer

Floor 6 Plan

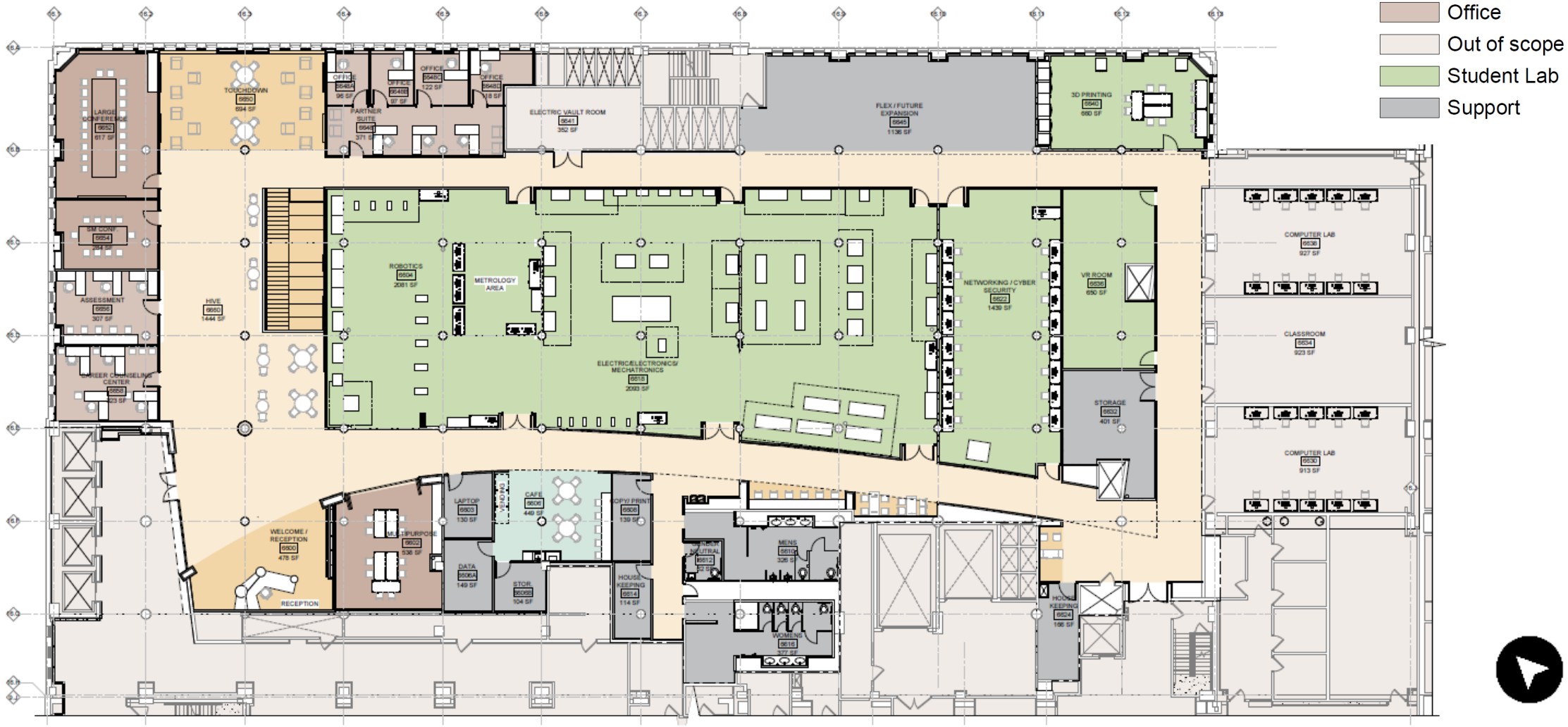


Image Credit: Designer

Welcome Center

Image Credit: Gene Avallone

"This state-of-the-art education and workforce development center will deliver accelerated training programs to provide New Yorkers in the Finger Lakes with the skills they need to compete in today's dynamic and everchanging job market. As we rebuild our economy, projects like this will ensure that New York remains the most business and worker-friendly state in the nation." New York Governor Kathy Hochul

Before Photos

Image Credit: Designer

The student lounge, named “The Hive,” promotes collaboration by giving students state-of-the-art areas to work and grow together.

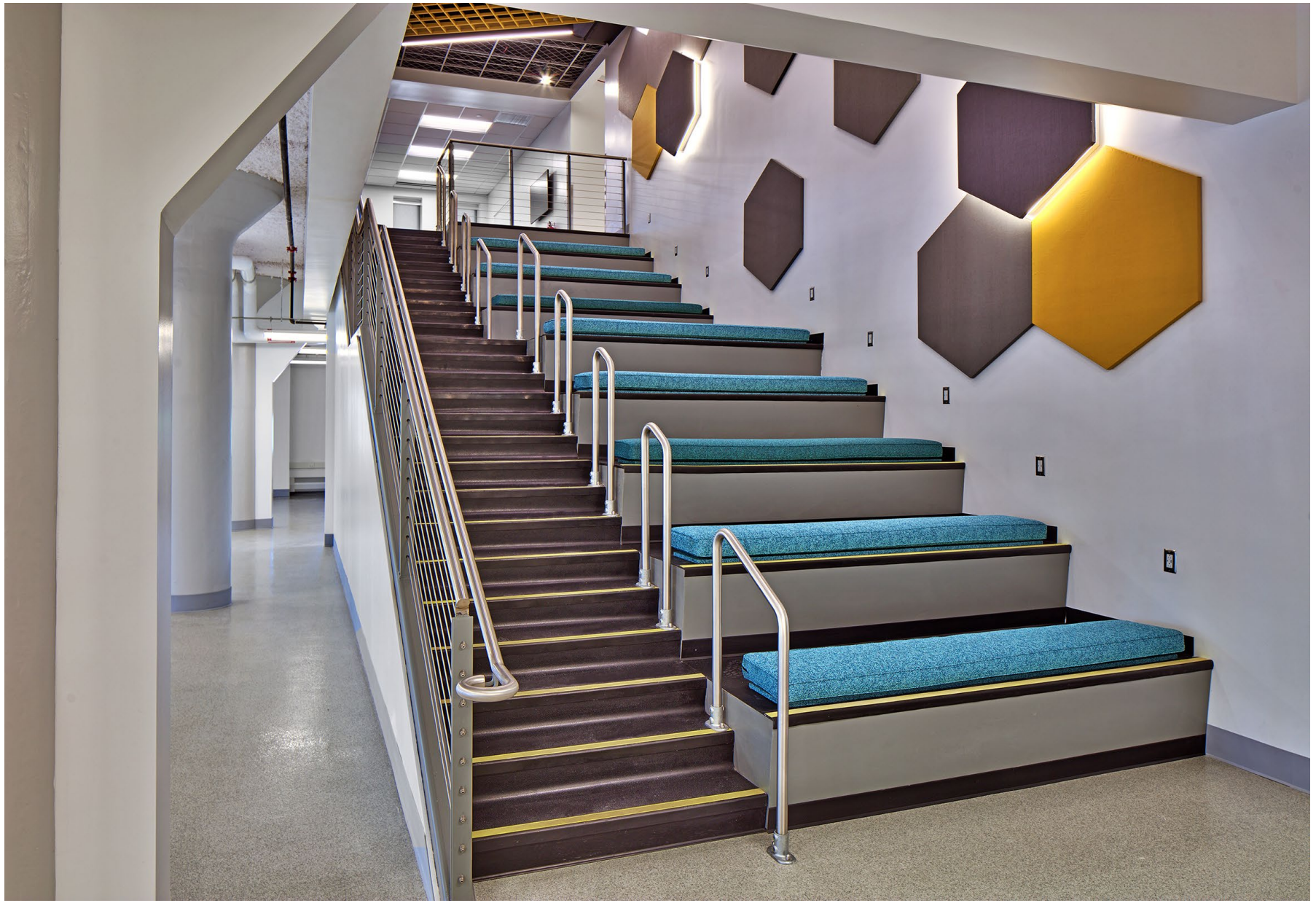
Image Credit: Gene Avallone

The Hive and the new interconnecting staircase leading to Floor Five.

Image Credit: Gene Avallone

Adjacent to The Hive, the original floor was removed for the new interconnecting staircase that leads to Floor Five.

Image Credit: Gene Avallone



In addition to acting as a connection to the lower floor, the staircase doubles as a flexible lecture and presentation space.

Image Credit: Gene Avallone

Multi-Purpose Classroom

Image Credit: Gene Avallone

The collaboration space is adjacent to the partner suite, allowing students and industry partners to interact.

Image Credit: Gene Avallone

Flexible Student Laboratory Space

Image Credit: Gene Avallone

3D Printing Laboratory

Image Credit: Gene Avallone