

Leinweber Computer Science and Information Building



Project Description

This proposed building of approximately 163,000 gross square feet will provide expansion space for the Computer Science and Engineering Department and also provide space to relocate the School of Information to North Campus. This new state-of-the-art facility will strengthen the collaboration between the two disciplines to develop breakthrough technologies, conduct innovative research, and facilitate an innovative learning environment for students. The facility will consist of active learning instructional space, flexible dry research labs, office and student services space for both units.

Energy Efficiency Measures

- The goal building's design and systems include several energy-efficient features to achieve better than 30% energy savings compared with an energy-code-compliant building as defined by ASHRAE 90.1-2013.
- Assess the amount of fritted glazing and solar shading as the building massing is developed to support improving energy conservation.
- Increased insulation on the roof and below-grade & above-grade walls.
- High-performance exterior envelope that also meets ASHRAE requirement of no more than 22% window-to-wall ratio.
- Meet storm water system requirements with an underground infiltration system in combination with the existing North Campus wetland system located near the Art & Architecture Building.
- Explore photovoltaic panel system on the upper roof levels to understand the potential energy consumption savings.
- Explore a blended mass timber, conventional steel, and concrete structure along with other building materials to understand potential embodied carbon reduction opportunities.

Other Sustainability Measures

- This building has been designed to be energy efficient and all electric meaning the building will not rely on natural gas for heating nor hot water. With no fossil fuels being used on-site, the Leinweber Computer Science and Information Building will be the first carbon neutral building on north campus once the university implements its planned 100% renewable power-purchase agreement.
- This project is registered under the LEED green building certification program with the certification goal of LEED Gold under the LEED v4 BD+C for new construction and major renovation pathway.
- The building will create greenspace on the site by providing vegetated roofs within portions of its footprint.
- Native and drought-tolerant plantings will be utilized & no irrigation for project landscape.
- Maximize daylighting within the building through the use of interior glazing.
- Construction waste will be diverted from landfills when possible.
- Low-flow fixtures reduce water consumption by a minimum of 20% beyond the Michigan Plumbing Code.