

## Flint College of Innovation & Technology Building



### Project Description

The University of Michigan-Flint College of Innovation and Technology proposes constructing a new academic teaching facility that promotes technology, flexibility, and collaboration. The proposed project will construct a 15,000 gross-square-foot building located north of the William S. White building on the north end of the Flint campus. The new building will house various instructional dry lab teaching spaces along with areas to encourage collaboration and interdisciplinary research.

### Energy Efficiency Measures

The Project has undergone a series of Energy Conservation Measures (ECM) and explored multiple envelope and infrastructure assemblies under ASHRAE 90.1-2013. The final selections have been evaluated for operational and embodied carbon requirements which meet the intent of the University's carbon neutrality goals. Additionally, the building façade and site structures will evaluate bird-safe design strategies and increased energy efficiency.

- The building's design and systems are designed with a stretch goal for energy cost savings of 20% compared with an energy code compliant building as defined in ASHRAE 90.1-2013.
- Increased performance on above grade walls and roofing assemblies
- Improved glass performance and SHG coefficient
- Improved lighting power densities compared to ASHRAE 90.1-2013 maximum levels
- Variable refrigerant flow (VRF), with direct outdoor air supply (DOAS) with a total energy wheel
- Increased efficiency energy recovery unit greater than standard ASHRAE 90.1-2013
- Increased inspection and analysis of building envelope during construction
- Infrared scan analysis of building envelope during construction

### Other Sustainability Measures

- Utilization of existing parking and site infrastructure
- Proximity to local and University public transit routes
- Located near local points of interest, library, banks, theaters, and restaurants encouraging occupants to walk or ride a bicycle
- Landscaping palettes to be selected from native and adaptive plants with low water and maintenance requirements
- Bioswales are being utilized for treatment and retention of stormwater
- Use of Hydrodynamic separator for optimum stormwater quality
- Low-flow fixtures reduce water consumption by a minimum of 18% beyond Michigan Plumbing code.
- Reduction of embodied carbon content when compared to baseline ASHRAE 90.1 2013 baseline buildings
- Low VOC adhesives, sealants, coatings, paints, flooring systems, and environmentally conscious products
- Materials used to contain recycled content when possible
- Materials used to be extracted and manufactured within 500 miles of the project site, when possible
- Clerestory translucent panels allow daylight harvesting into core program spaces
- Interior glazing allows borrowed natural light to enter into interior core spaces