

LUC Engineering Flex Laboratory

Project Highlights and Results

- New construction flexible higher education laboratory building on existing infill site.
- Flexible lab embodies the University engineering program's active learning framework by focusing on open spaces and collaborative environments with movable furniture and equipment.
- The building incorporates a large glass façade to allow the public the opportunity to observe and contemplate the nature of engineering.

Project Background

Owner:	Loyola University Chicago
Location:	Chicago, IL
Team/Team Lead:	Don McLauchlan, Claudine Harig, Bhupendra Tailor
Elara Role:	MEP Engineer
Type:	New Construction
Construction Cost:	\$3,800,000

Project Overview

Building Type:	Higher Education Laboratory
Building Attributes:	Single-story, 9,255 SF, (4) instructional lab spaces, a research lab, video conference rooms, and maker rooms
Initial Construction:	2018
MEPFPIT Systems:	Packaged RTUs w/ economizer and energy recovery, FPB, VAV, Condensing HW Boiler Plant, HW reheat, perimeter HW baseboard, radiant heat, dedicated exhaust, LED lighting, daylighting, and a centralized DDC system

Additional Project Details

- Despite the small size of the building, thirteen (13) thermal zones were designed to address the needs of the different space types and provide for flexibility in the space definitions and usages.
- An underground walker duct system was designed to support the power needs of the flexible lab spaces.
- Campus network infrastructure was extended to the building from the main campus as part of the project.
- The glass façade incorporates electrochromic technology, a form of smart glass, to control transparency based on the intensity of the sunlight on the façade. The glass becomes less transparent as the sun sets, thus reducing solar heat gain and glare.

