

# WELCOME TO CLC'S LEED PLATINUM SCIENCE AND ENGINEERING BUILDING



## THE COLLEGE OF LAKE COUNTY IS A LIVING LAB, WHERE INNOVATIVE BUILDINGS AND OPERATIONS INSPIRE LEARNING AND CAREER OPPORTUNITIES

Completed in January 2018, the Science and Engineering Building is located in the A Wing of the College of Lake County Grayslake Campus. The 42,000 square foot building houses photonics, mechatronics and chemistry labs and classrooms. The \$24,925,000 project was funded through state Capitol Development Board and local funds.

The building is certified by the U.S. Green Building Council as LEED Platinum, the highest level of green building standards. In fact, its score of 90 points out of 110, makes it the highest scoring new construction project in the state of Illinois.

Known by its shortened name, the Science Building is designed to reduce energy use by 66% and water use by 41%, compared to a standard science building of similar size. Classrooms host these energy efficiency features:

- Variable speed exhaust fan for 100% fresh air ventilation
- Energy efficient fume hoods in chemistry labs
- Daylight harvesting (Maximizing natural light in classrooms)
- Solar shades over windows (Allowing summer shade and winter direct sunlight)

You can follow the **LIVING LAB TRAIL** across the College of Lake County Grayslake Campus to discover sustainability and wellness in action. Around the Science Building you will find signs identifying these sustainable features:

### SOLAR PHOTOVOLTAIC (PV) SYSTEM

- 187 solar PV panels, rated at 56.1 kW
- Annual energy yield (approx.): 61,111 kWh
- Anticipated annual saving is \$5,280

### GEOHERMAL HEATING AND COOLING SYSTEM

- Water travels through the building and out through 47 wells that are 500 feet deep each
- Heat from the building is sunk into the ground in summer and the relative heat of the earth is condensed to heat the building in the winter
- Geofield wells are to the south of the building, heat pumps in the 4th floor utility room

### GREEN ROOF

- 1,500 sq. ft. of plants, approximately 750 of 1'x2' trays
- Plants above entry hallway, visible from the 3rd floor
- Plants are sedum: tolerant of extreme heat and cold, shallow roots
- Plants absorb rainwater to reduce flooding, and add insulation in extreme temperatures

### RAINWATER COLLECTION

- Underground storage tank has capacity of 8,000 gallons
- Water is filtered and undergoes minimal treatment for bacteria, but is not drinkable
- Used for 12 toilets and urinals on the three floors, not for faucets or drinking fountains