



# UNIVERSITY OF WATERLOO ENGINEERING FIVE BUILDING

WATERLOO, ON

## QUICK FACTS

- + Multi-Use Teaching Laboratory
- + Post-Secondary
- + 150,000 square feet (approx.)
- + \$44-million Budget
- + IIDA Global Excellence Award Winner
- + Smith + Andersen Mechanical

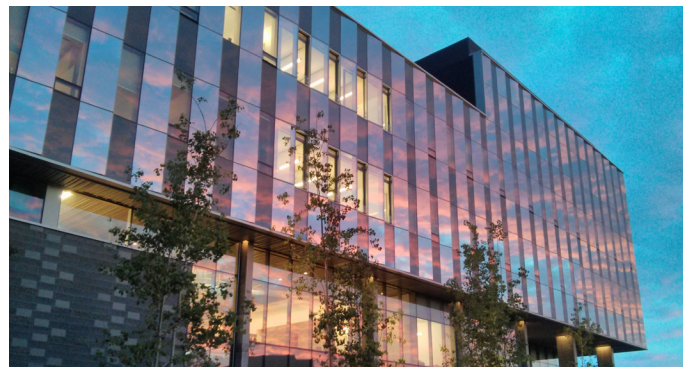
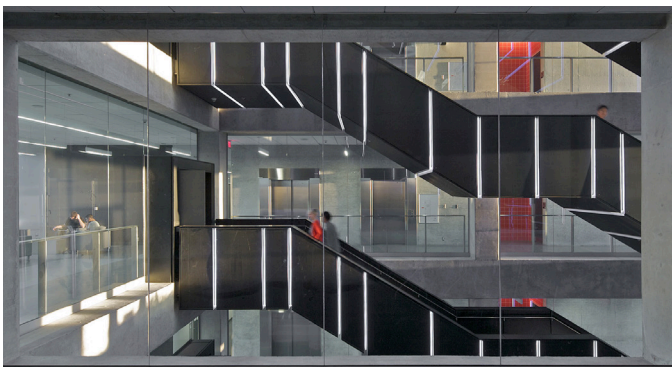


PHOTO CREDIT: Alina Cornea / Lisa Logan





# UNIVERSITY OF WATERLOO ENGINEERING FIVE BUILDING

## ABOUT THIS PROJECT

- + One of the larger buildings on campus, housing the Departments of Electrical and Computer Engineering (ECE), Mechanical Mechatronics Engineering (MME), and Systems Design Engineering.
- + Centre of the building contains the 20,000 square foot Student Design Centre (SDC), a facility for undergraduate research, experimentation, and innovation including: work bays, design studios, meeting rooms, student machine shop, three engine test labs, an anechoic testing chamber, and a large computer commons.
- + The upper levels of the building include administrative offices, dry labs, classrooms, common rooms, workshops, and studios.
- + HVAC system comprises of several central variable volume air handling units to supply the labs and office areas.
- + There are two centralized heat recovery air handling units complete with enthalpy wheels pre-heat/pre-cool the ventilation air to reduce annual energy usage.
- + Design features carbon dioxide monitoring, low flow fixtures, variable speed pumping, steam heating, semi-instantaneous domestic hot water production.
- + Specialty systems include welding lab exhaust, wood and composite sanding exhaust, hydrogen fuel cell exhaust and gas detection, and paint booth exhaust and filtration systems.

**LOCATION**  
Waterloo, ON

**SMITH + ANDERSEN  
SERVICES PROVIDED**  
Mechanical

**KEY TEAM MEMBERS**  
Perkins & Will

**SIZE**  
150,000 sq. ft. (13,935 sq. m.)

**BUDGET**  
\$44 Million

**COMPLETION YEAR**  
2010

**AWARDS**  
IIDA Global Excellence Award  
*Best in Cultural/Institutional  
Educational* (2011)

## HOT BUTTONS

POST-SECONDARY

LABORATORY

NEW BUILDING

MECHANICAL DESIGN

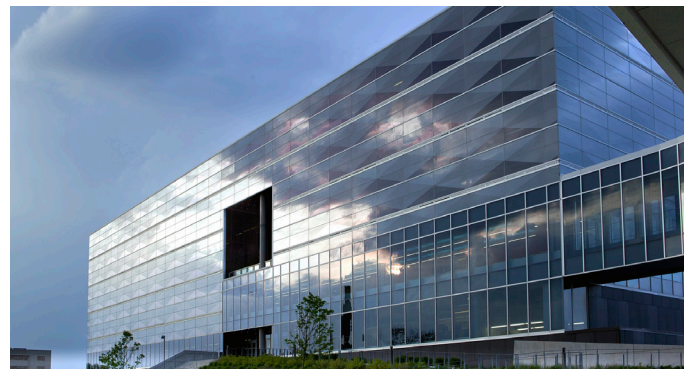


PHOTO CREDIT: Alina Cornea Architectural Photography