

# Sadlon Health & Wellness Centre, Barrie

Georgian College—Barrie Campus

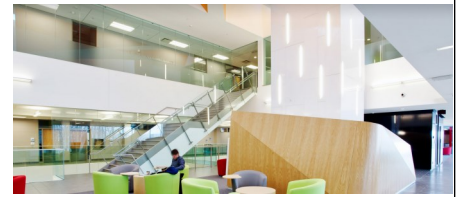
PROJECT EXPERIENCE



In the fall of 2011, e-Lumen completed the Sadlon Health & Wellness Centre at Georgian College, Barrie Campus (LEED SILVER achievement). The multi-use building has a variety of electrical systems as would be required of a state of the art teaching facility. Science classrooms, private offices, and a host of base medical teaching environments all included in the project's budgeted \$5.5million dollar electrical system.

The project started by rationalizing the campus' main service and exterior switchgear. We re-fed one building from another in order to free up an exterior distribution cell and save the college the expense of having to re-build the exterior power that was feeding the entire Barrie Campus. We completed a detailed study of the power of the existing building and deleted its independent feed from the main campus supply. Following this, we brought power from one side of the campus to the other using horizontal drilling of almost a kilometer in length. The primary feeder cable went under existing parking lots without any exterior damage except for the installation of new manholes as required to facilitate the pathway around existing buildings.

e-Lumen was involved in extensive meetings that dealt with all facets of the construction project. This comprised but was not limited to initial meetings with the end user client all the way to the final commissioning of all systems. Every wire within the facility was part of our project and drawings, including: electrical, lighting, lighting controls, window shades, security, CCTV, audio visual, fire alarm, egress lighting, security system, public address, parking control, simulators (nursing ICU and ambulance driving), spa equipment (pedicure chairs, infrared sauna, massage chairs, etc.), science equipment, optical manufacturing equipment, dental suites, medical examination suites, hearing testing chamber and suites, pharmaceutical equipment, computer lab, private offices, UPS, network data cabling, cable tray, distributed antenna system, elevator systems, metering system, all mechanical equipment, BAS and other special equipment.



## PROJECT DETAILS

- Greater than 16,000m<sup>2</sup>, 3 Storey + basement utility space
- 2,500 Amp, 600V, 3 phase system
- \$5.5 million electrical cost
- Multi-phase electrical project involving re-distribution of campus power at 4160V to two existing buildings
- Dental Hygiene Lab, over 60 dental chairs and suite providing student training on this service
- Nursing Lab and Simulators (ICU to Neonatal Hospital beds (more than 80 beds) examples – no surgical beds)
- Pharmacy clinic and teaching facility
- Ambulance training lab complete with mock ambulance driving simulator
- Speech, Language and Hearing Clinic
- Network cabling design, complete pathway design of all system throughout
- Security system infrastructure cabling
- Public Address system
- Emergency call system
- Nurse Call system
- Metering system
- Fully digitally addressable lighting control of all luminaires Integrated digital shade system for daylight control
- Fully digital addressable exterior lighting system

