



HIGH PERFORMANCE
NEW CONSTRUCTION

Energy Modeling Workshops Provide Career Value for Design Professionals

The “green economy” is expected to play a major role in Canada’s economic recovery. That means a bright outlook for green jobs, and nowhere more so than in the building sector. Higher green standards for new commercial buildings, utility and government energy efficiency incentives, and certification programs such as Leadership in Environmental and Energy Design (LEED) all are driving demand for professionals trained in energy modeling – an essential tool for verifying the energy use of design choices.

The Ontario Power Authority’s (OPA’s) High Performance New Construction Program (HPNC), delivered by Enbridge Gas Distribution and Union Gas, offers incentives to incorporate electricity efficiency in the design and construction phases of new buildings, additions and major renovations. The custom project stream of this program mandates the use of approved energy modeling software to establish projected energy savings for custom incentive applications.

The OPA recognizes that development of energy professionals is critical to the success of efforts to green the built sector. For this reason HPNC is offering a series of building modeling workshops. These provide training in Natural Resources Canada’s (NRCan’s) EE4 and the U.S Department of Energy’s freeware application eQUEST– two of the approved software programs needed to qualify for HPNC incentives as well as Enbridge’s and Union Gas’ Design Assistance Programs (DAP).

The EE4 energy modeling workshops are offered in conjunction with NRCan and taught by NRCan-certified trainer Brian Fountain, P. Eng, of Enermodal Engineering. Marlin Addison of Quest Energy Group and the School of Architecture at Arizona State University conducts the eQUEST workshops. Both instructors are recognized experts in simulation for building energy use analysis.

The workshops combine lectures with hands-on sessions and provide participants with the tools and skills they need to assess building energy performance and perform comparative analyses of building designs and technologies. Topics include basics of simulation, overview of software capabilities, detailed walkthrough of software features, and practical application of the software in a building case. Participants are also encouraged to bring detailed modeling questions to the workshops for discussion.

Both EE4 and eQUEST workshops are two-day sessions. Breakfast, lunch and breaks are included in the registration fees. Participants are required to bring a PC compatible laptop and are provided with the relevant modeling software.

Architects, engineers, modelers and other design professionals will find these courses a great investment in their professional development. Energy modeling adds value to the design process for commercial, institutional, industrial, agricultural and multi-family buildings. In addition to its role in qualifying buildings for incentives and environmental certification, energy modeling enables design teams to provide building owners and developers with options for long-term operating cost savings.

Eighteen sessions have been held to date, each filled to capacity, with participants coming from as far away as Michigan and Vancouver. Surveys at the end of the courses indicate that participants find this an enjoyable and effective way to acquire modeling expertise. Many consider this training vital for their career development. Because both EE4 and eQUEST are in wide use and each has its own strengths, participation in both sessions is recommended. Space is limited and early registration is encouraged.

HPNC and NRCan are each contributing financially to keep workshop fees as low as possible: \$200.00 for EE4 and \$300.00 for eQUEST. In addition HPNC will refund the course fee when a graduate submits his/her first application for funding under HPNC's custom building projects incentive stream.

For more information on OPA's High Performance New Construction Program visit: www.hpnc.com or call 1-888-OPA-HPNC.

For information on upcoming building modeling workshops and to register visit: www.enbridgeonline.com/workshop.