Experiential Learning at McMaster University’s Nuclear Research Facilities

ISCI 3IE2/ARTSSCI 3IE2

Course Summary

**Format**

Four day workshop (24 h total)
9 x 90 minute classroom sessions
7 x 90 minute practical sessions

**Term**

Winter Reading Week (February 20-23, 2018)

**Time**

9:00-16:00 (lunch break 12:00-13:00)

**Description**

A week of experiential learning based at McMaster University’s Nuclear Research Facilities, including the McMaster Nuclear Reactor, the High Level Laboratory Facility, and the McMaster Accelerator Laboratory. Participants will be introduced to a wide range of nuclear science topics through a blend of practical sessions and classroom learning. In-class sessions will include an introduction to radioactivity, health effects of ionizing radiation and safe work practices, generation of radioactive materials, medical applications of radioisotopes, and neutron-based analysis techniques. Participants will get hands-on experience in detecting and characterizing radioactive materials, the production of radioisotopes and radiopharmaceuticals, neutron radiography, and more. *

**Prerequisites**

Completion of a Level 1 program in Arts & Science or Integrated Science. A background in nuclear science or engineering is neither expected nor required. Participants must consent to be designated as Nuclear Energy Workers. †

**Enrolment**

Minimum 6
Maximum 12

* Note that the content of practical sessions is subject to change depending on availability of facilities.
† For more information on NEW designation, see http://www.mcmaster.ca/healthphysics/users/faq.html