HUMBER

APPLIED RESEARCH OPPORTUNITY:

Work Alongside Faculty Member and Student from Kenya's Kisumu National Polytechnic on Transformative Water Harvester

We are looking for a Humber College faculty or staff member who is interested in working with a faculty member and student from Kenya's Kisumu National Polytechnic on the development of a combine harvester that can eliminate the toxic water hyacinth from Lake Victoria.

This applied research project contributes to the Kenya Education for Employment Program (KEFEP), a 3.5 year initiative supporting Kenyan National Polytechnics to develop new competency-based programs in mechanical engineering and renewable energy to increase employment and economic development opportunities for Kenyan youth.

Technical Expertise Needed:

- TIG and MIG Welding techniques tailored for a student who is currently studying for a Certificate in Welding and Fabrication, and is in Level 3 of Arc Welding
- Design skills in AutoCAD software
- Advise on material procurement, fabrication and assembly of harvester
- Knowledge of boat building and maintenance (not essential)

Research Areas:

- Mechanical engineering,
- Electrical and electronic engineering
- Automotive engineering

Time Committment:

5-7 working days on Humber campus, and virtual mentoring through email and/or Skype/WhatsApp calls/texts as needed.

Main Objectives:

- Collaborate with a faculty member and student from Kisumu National Polytechnic's Faculty of Automobile Engineering during their visit to Canada
- Strengthen their technical and applied research skills
- Contribute to the documentation of project results