



BRITISH COLUMBIA  
INSTITUTE OF TECHNOLOGY

## School of Energy

### 2012/13 Electrical Engineering Capstone Projects

Students	Project	Year	Faculty Advisor	Collaborator(s)
Ryan Arnason Alan Chan Sean Miller	<b>Concrete Block Strength Tester:</b> An estimated 316,000 people died and over one million people were left homeless after a modest-sized (7.0) earthquake in Haiti in 2010. Much of the problem was systemic use of weak concrete blocks for building construction. We are developing a tester that could help to prevent similar such disasters from occurring in the future.	2012/13	Neil Cox	Diane Kennedy (Electrical) Glenn Pellegrin (Electrical) James Booth (Physics) Svetlana Brzev (Civil) Builders Without Borders
Christan Beharell Chad Watson	<b>Waste Monitoring System:</b> A remote monitoring and management system such as is being developed in this project can help to make collection of garbage from dumpsters more efficient and effective.	2012/13	Robert Trost	Burnaby Engineering
Travis Fary Masaru Ho Kris Monpetit	<b>Mobile Health Monitoring System:</b> This mobile system monitors the health of injured people after an urban disaster so that health care professionals can maximize their effectiveness.	2012/13	Bob Gill	Nancy Paris (Tech Centre) Bruno Jaggi (Biomedical)
Sean Garrity Michael Hume Isaac Scheffers	<b>Steam Control Modeling and Optimization:</b> Steam is a dominant element of electric power generation systems and many industrial processes. This project expands the utility of the BCIT Centre of Energy Education and Research (CEER) in developing and evaluating advanced strategies for efficiently and effectively controlling steam in such systems and processes.	2012/13	Glenn Pellegrin	Sanja Boskevic (Power) Jim Armstrong (CEER Centre)
Alex Cosariu Ron Doria Kurt Melney	<b>Emergency Contact Communicator:</b> Lives can be lost unnecessarily when people have car accidents in remote areas. This system calls in help as quickly as possible.	2012/13	Bob Nicholson	Justice Institute