

CIVL 500 THESIS TOPICS 2015-2016

	THESIS TOPIC	SUPERVISOR
1	Use of thermal technologies to remediate soil and groundwater.	Dr. Kueper
2	Numerical modelling of groundwater remediation	Dr. Kueper
3	Bioengineered shore protection using coconut fibre	Dr. Mulligan
4	Tidal power from currents in the Bay of Fundy	Dr. Mulligan
5	Investigation of sediments as sources/sinks of nutrients in 1) algae-impacted inland lakes or 2) on-site treatment systems for fish hatchery wastewaters.	Dr. Anderson
6	Investigation of influential variables in plant-based treatment of greenhouse effluents	Dr. Anderson
7	Fibre optic sensors for structural health monitoring	Dr. Hoult
8	Our crumbling water mains: preventing cast iron pipe failure	Dr. Hoult/ Dr. Moore
9	Corrugated Steel Culverts: humble water way or ground swallowing behemoth	Dr. Hoult/ Dr. Moore
10	Quantitative visualization of groundwater contamination	Dr. Mumford
11	Modelling bubble-facilitated contaminant transport in porous media".	Dr. Mumford
12	Development of X-Ray imaging for a non-destructive assessment of hidden damage within geosynthetic clay liners	Dr. Take
13	Evaluation of HDPE Geomembrane diffusive properties with respect to thickness	Dr. Rowe
14	Fire resistance of fibre reinforced polymer reinforcing bars	Dr. Green
15	Sustainable materials for northern building conditions	Dr. Green
16	New materials for renewable energy installations	Dr. Green
17	Flexural behavior of concrete sandwich panels with insulation for energy efficiency	Dr. Fam
18	Durability of a new concrete bridge deck with FRP stay in place forms under environmental and fatigue conditions	Dr. Fam
19	New FRP composite for concrete structures rehabilitation using corn-cob-based sustainable bio resins	Dr. Fam
20	Modelling Red Water Discolouration Potential in Drinking Water Distribution Systems	Dr. Fillion
21	Physical response of (i) landfill geosynthetic liners or (ii) buried polymer pipes using elevated temperatures to simulate long-term creep response or numerical modelling to calculate local stresses	Dr. Brachman
23	Methods for the restoration of highly engineered rivers to their natural form and function	Dr. da Silva
24	Landslide tracking using point cloud data	Dr. Take
25	Developing a novel sensor to measure full-field water surface velocities using a high-resolution digital camera and glitter.	Dr. da Silva/ Dr. Take
26	Use of solar engineering principles to predict the surface temperature of exposed geomembrane liners	Dr. Take
27	Monitoring and assessing railway infrastructure through high-speed imaging	Dr. Hoult/ Dr. Take