

**CARLETON UNIVERSITY**

**Department of Mechanical and Aerospace Engineering**

**MASTER'S THESIS EXAMINATION**

**CANDIDATE:** *Mackenzie Reid*  
*Bachelor of Engineering, Carleton University, 2015*

**DATE:** *Thursday April 27, 2023, 10:00 Video Conference*

**THESIS TITLE:** *Topology Optimization of Passively Cooled Heatsinks for High Efficiency Electronics*

**EXAMINATION BOARD:**

<b>Member of Joint Institute</b>	Hai Jun Cho, Mechanical Engineering - University of Ottawa	(Video Conference)
<b>Member of Department</b>	Fidel Khouli, Mechanical & Aerospace Engineering	(Video Conference)
<b>Thesis Supervisor</b>	Mostafa El Sayed, Mechanical & Aerospace Engineering	(Video Conference)
<b>Chair of Defence</b>	Eng Kuan Moo, Mechanical & Aerospace Engineering	(Video Conference)
<b>Chair/Director of Department or Designate</b>	Ron Miller	(Ex-officio)
<b>Dean of Faculty</b>	Larry Kostiuk	(Ex-officio)
<b>Dean, Faculty of Graduate and Postdoctoral Affairs</b>	Patrice Smith	(Ex-officio)