

**CARLETON UNIVERSITY**

**Department of Mechanical and Aerospace Engineering**

**MASTER'S THESIS EXAMINATION**

**CANDIDATE:** *Liam Mann*  
*Bachelor of Engineering, Carleton University, 2020*

**DATE:** *Tuesday December 19, 2023, 10:00 Video Conference*

**THESIS TITLE:** *Techno-economic feasibility of a solar-assisted transcritical CO2 heat pump system for a Canadian net-zero energy home*

**EXAMINATION BOARD:**

<b>Internal Examiner</b>	Elie Azar, Civil & Environmental Engineering	(Video Conference)
<b>Member of Department</b>	Ahmed Abdulla, Mechanical & Aerospace Engineering	(Video Conference)
<b>Thesis Supervisor</b>	Cynthia Cruickshank, Mechanical & Aerospace Engineering	(Video Conference)
<b>Thesis Co-Supervisor</b>	Jean Duquette, 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)