

**CARLETON UNIVERSITY**  
**Department of Mechanical and Aerospace Engineering**  
**PH.D. THESIS EXAMINATION**

**CANDIDATE:** *Cem Kalkan*

**DATE:** *Wednesday December 18, 2024, 9:00 4124 Mackenzie Building*

**THESIS TITLE:** *Development of a residential-scale PV/T driven combined cooling, heating, and power system*

**EXAMINATION BOARD:**

**External Examiner** Adam Wills, National Research Council of Canada (In Person)

**Internal Examiner** Burak Gunay, Civil & Environmental Engineering (In Person)

**Member of Joint Institute** Miroslava Kavagic, Civil Engineering - University of Ottawa (In Person)

**Member of Department** Kristen Schell, Mechanical & Aerospace Engineering (In Person)

**Thesis Supervisor** Jean Duquette, Mechanical & Aerospace Engineering (In Person)

**Chair/Director of Department or Designate** Edgar Matida (Ex-officio)

**Dean of Faculty** Larry Kostiuk (Ex-officio)

**Vice-Provost, Graduate Studies** Dan Siddiqi (Ex-officio)