



MIE498H1: Research Thesis 2024-2025

Supervisor	Mohini Sain
Supervisor email	m.sain@utoronto.ca
Number of Positions	5
Open to	Undergraduate Mechanical and Industrial Engineering Students
Term Offered	Winter (S)
Research Area	Materials, Energy, Protein Biotechnology, Advanced manufacturing, MD Simulations
Research Topic	Green Hydrogen, Super critical extraction, e-machine Design, New PowerTrain, Battery, Fuel cell
Project Description	Photolysis of Methane and CO ₂ , Reactor Design for carbon nanotube and Hydrogen production, Super-critical water extraction of nanoscale impurities, Advanced Polymeric Electrolyte for Solid batteries, Bio-battery and fuel cell design and fabrication, High Voltage Batteries, Metal-hybrid 3-D printing for Energy Devices, Biomethanation of Solid Biomass and Bovins.
Additional Information	N/A
Application Instructions	Please send one page Notice of Interest to m.sain@utoronto.ca and CC maria.semeniuk@mail.utoronto.ca