

Trevor R. Winchester, EIT

Email: trwinchester@rogers.com

“Aspiring to help lead change in society as a Professional Engineer”

Profile Recent University of Windsor Mechanical Engineering (Co-Op) graduate with an added specialization in Materials Engineering. Seeking meaningful employment in a role that will use and develop my engineering skills. Fueled by a passion to learn and use engineering tools and principles to solve real problems.

Core Competencies

Practical Skills	Simulations and Software	Mechanical Engineering
<ul style="list-style-type: none">• Problem Solving• Delivery of Results• Time Management• Task Definition, Organization, and Execution• Communicating with Integrity• Team Leadership and Project Management• Promotion of Healthy Team Dynamics• Pro-active Facilitation• Self-starter who Adapts to and Embraces Change• Ready to Learn and Grow	<ul style="list-style-type: none">• Modeling (FEM, CFD)• C++, MATLAB & Simulink, CAD, MS Office (Word, PowerPoint, Excel – formulas, VBA)	<ul style="list-style-type: none">• Mechanics & Machine Design, Thermodynamics, Fluid Mechanics, Heat Transfer, Strength of Materials• Knowledge of HVAC, piping, molding, and process system design
	Operations Control	Manufacturing
	<ul style="list-style-type: none">• Process control• System control• PID controllers	<ul style="list-style-type: none">• Yellow Belt Lean Six Sigma• Product life cycle• Minimize waste
	Analysis and Design	Materials Engineering
	<ul style="list-style-type: none">• Failure analysis (FMEA)• Data analysis• Conceptual design• Drafting (including GD&T)	<ul style="list-style-type: none">• Properties and manufacturing of engineering materials• Thermochemistry, Fracture mechanics, material testing• Wear and surface coatings

Education

- **Bachelor of Applied Science Honours – Mechanical Engineering (Co-Op) (With Distinction)** 2018-2022
 - University of Windsor, Windsor, Ontario
 - Added specialization in Materials Engineering
 - Capstone Project: Design and simulation of lightweight composite body armor using metallic foam

Work Experience

Office of Open Learning, University of Windsor

Promotes online, open, and hybrid learning and teaching approaches and opportunities.

Senior Online Learning Assistant (Work Term 3 – Remote Working)

Fall 2021

- Promoted to “Senior” position after two prior work terms
- Independently and as part of teams - designed, organized, and executed numerous department projects
- Represented the University of Windsor in projects undertaken by a University and College Consortium
- Facilitated the design and development of the Consortium’s *Ontario Extend Liberated Learner Project*.
- Created graphics, use-cases, and websites to successfully propose multiple project ideas to the Consortium, many of which were actioned.

Online Learning Assistant (Work Term 2 – Remote Working)

Winter/Spring 2021

- Team leader for a group of 8 co-op students writing e-books on student's perspective for online schooling
- Through presentation and discussion, engaged numerous university faculty in alternative online teaching methods, including making a presentation to 60 faculty members about new approaches.
- Co-authored a successful project grant proposal.
- Developed and presented online learning project concepts to a University and College consortium.

Online Learning Assistant (Work Term 1– Remote Working)

Summer 2020

- Team leader for a group of 12 co-op student coworkers engaged in media development for new and returning students transitioning to remote (online) classes.
- Assisted engineering professors with their optimization of the transition from in-person to online delivery.
- Managed and delivered projects that prepared university students for remote learning, including development of the *Introduction to Learning Online Workshop* that helped 600+ students.

North Mississauga Soccer Club

Paid Position supporting the Club's soccer development goals

Technical Soccer Coach

Summer 2019

- Led improvement in the quality of soccer skills for youth players aged 3 to 12.
- Mediated conflicts and facilitated dispute resolutions between and among players and/or parents, both on and off the soccer pitch.
- Paid coach for a youth soccer team and paid game leader for youth soccer leagues.

Volunteer Experience

Undergraduate Research Assistant, University of Windsor

Summer 2022

- Mounted, ground and polished metallic samples in a laboratory for scanning electron microscopy
- Facilitated an experiment for a Master student

Music Council Leader, Erindale Secondary School

2017-2018

- Planned, organized, and facilitated daily events in the music program.
- Supported the music director in the organization of concerts and festivals.

Leader in Training I and II, City of Mississauga

Summer 2016

- Leader for summer camp for children aged 3-12, ensuring a safe and fun environment.
- Worked in a team to support the City's summer camps.

Awards/Certifications

- **Engineer-In-Training (EIT)**, Professional Engineers Ontario January 2023
- **Yellow Belt Lean Six Sigma**, SSGI December 2022
- **WHMIS 2015**, University of Windsor February 2022
- **Impact Award**, University of Windsor Summer 2020
 - For personal contributions in helping students and faculty members transition to remote education
- **First Aid**, Canadian Red Cross Spring 2019
- **Principal's Award for Student Leadership**, Erindale Secondary School June 2018