# ROBOTICS UPDATE



# UMEI ROBOTICS TEAM COMPETES IN PROVINCIALS

Although only their second season in the FIRST Robotics Competition, the rookie UMEI team made it all the way to the Provincial Championship in Hamilton April 6 – 8. It was a long journey of qualifying before they met up with the best 80 teams in Ontario.

FIRST Robotics is a world-wide competition, and UMEI is recognized as team 8081 in the world. After the challenge was unveiled on January 8, UMEI students had to design and build a robot that could load road pylons and cubes onto pegs and platforms at various heights as well as balance their robot on a tilting station. The teams then meet at competitions and face off in 3-on-3 competitive play, with points awarded in a variety of ways. "Our team wanted to build a robot that could be really versatile and reach all levels." commented lead builder Aidan Brown.





# "IT IS CLEAR UMEI'S GOAL OF 'WHOLE PERSON LEARNING' IS BEING REALIZED. IT'S NOT ABOUT THE ROBOTS - IT'S

UMEI entered one of the hardest competitions in Ontario staged at the University of Waterloo as their first showing. They finished 12th out of 32 teams, making the playoffs and winning the Engineering Inspiration Award, which celebrates outstanding success in advancing respect and appreciation for engineering within the team's school and community. Isabel Neufeld, Safety Captain, was also awarded Safety All-Star for going above and beyond to create a culture of safety. "I was pleased with the way our team performed under pressure and the judges were really impressed with our program," said robotics teacher John Fittler.

Team 8081 competed the following week at the University of Windsor, finishing 4th out of 30 teams and winning the Quality Award, celebrating machine robustness in concept and fabrication, and Isabel was again recognized as the Safety All-Star. Chani Wiens, Director of Enrollment at UMEI, commented, "When you see the variety of awards that these students are being recognized for, it is clear that our goal of 'whole person learning' is being realized. It's not about the robots – it's about the students."



ABOUT THE STUDENTS."

After some changes to their robot, UMEI traveled to the provincial championship and finished qualifying rounds with a 7-5 record, making it into the semi-finals. In the end, they narrowly missed the chance to attend the World Championships in Houston, Texas and are currently ranked 35th out of 127 teams in Ontario. "I can't wait until next season and the new challenge reveal," commented lead programmer Ben Recker. "This year was our team's first time through the whole competition season, and we are confident we will be even better next year."

Team 8081 would like to thank all their sponsors who contributed financially or with parts and labour for their 2023 robot. A full list of the sponsors and mentors can be seen at <u>umei.ca/new-enriched-robotics-program/</u>.





## **AWARDS ROUND-UP**



## ENGINEERING INSPIRATION AWARD

Celebrates outstanding success in advancing respect and appreciation for engineering within a team's school or organization and community. Guidelines include:

- Extent and inventiveness of the team's efforts to recruit students to engineering
- Extent and effectiveness of the team's community outreach efforts
- A commitment to science and technology education among the team, school, and community.

### **QUALITY AWARD**

Celebrates machine robustness in concept and fabrication. Guidelines include:

- A team must be able to describe their quality plan i.e. how their design ensures robustness throughout the competition.
- The entire machine demonstrates quality: workmanship, welds, attachment systems, wiring, paint, etc.
- The machine can withstand the rigors of competition – maintaining functionality, including the use of designed-in redundancy and risk mitigation measures.
- Building the machine contributes to the team's success.

#### SAFETY ALL-STAR

Safety Captains who go above and beyond to create a culture of safety are eligible for *Safety All-Star*. Isabel Neufeld won this award at both the Waterloo and Windsor events!







to our amazing sponsors!

None of this would be possible without you!

The skills, confidence and memories we are gaining are invaluable to us! Thank you!

