



2016

ONTARIO NETWORK OF WOMEN IN ENGINEERING



At a time when science literacy is increasingly linked to economic growth and is necessary for finding solutions to complex social and environmental problems, all citizens, not just future scientists and engineers, need to be willing and able to confront science-related dilemmas.

- PROGRAM FOR INTERNATIONAL STUDENT ASSESSMENT (PISA) 2015 – RESULTS IN FOCUS

ONWiE

Since 2005, the Ontario Network of Women in Engineering (ONWiE) has been promoting the engineering profession to girls and young women across Ontario. ONWiE is a unique partnership between the accredited schools and faculties of engineering across Ontario, collaborating to provide opportunities for women and girls to explore engineering career options. ONWiE members and supporters work together to improve the participation rate of female students and professionals in engineering in Ontario and Canada.

ONWiE is committed to inspiring our next generation of engineering students and changing the face of engineering through:

COLLABORATION

ONWiE members and supporters work together to improve the participation rate of female students and professionals in engineering.

ENGAGEMENT

Through programs such as Go ENG Girl, Go CODE Girl and Badge Day, ONWiE members engage female students in hands-on activities and introduce them to the engineering profession.

SHARING BEST PRACTICES

Through communication of best practices and mentorship opportunities, all ONWiE stakeholders benefit from a diversity of insights and assessment strategies.

PROVIDING OPPORTUNITIES

ONWiE connects a myriad of people and opens many doors by offering opportunities for participants to network and share relevant resources.



Mary A. Wells Ph.D. P.Eng.
ONWiE Chair



Ms. Rohini Wittke
ONWiE Coordinator

For more information please contact us at onwie.ca.



WE GOT TO BUILD!!! Very friendly students helped me. If this was a whole day, I would come no matter what, because this opportunity is amazing and those 2-4 hours I spent here were amazing!”

- GO ENG GIRL PARTICIPANT

INSPIRING OUR NEXT GENERATION OF ENGINEERING STUDENTS

Go **ENG Girl/GÉNIales les filles** is an exciting opportunity for girls in grades 7-10 and their parents to visit one of the university or college campuses across Ontario and Canada that offer accredited engineering programs. The girls meet with engineering students and professionals and engage in fun-hands on engineering activities. This province-wide program has started to spread across Canada as a national outreach program and is coordinated through the ONWiE network and has been an annual event since 2004.

During Go ENG Girl, the girls work with engineering students and peers through hands-on activities that encourage them to think like engineers and design creative solutions to challenging and realistic problems. Parents get to hear about the engineering profession and career opportunities from both engineering students and working professionals as well as career opportunities that studying engineering will offer to their daughters.

In 2016 Go ENG Girl was offered at 16 locations in Ontario and seven additional locations across Canada, from BC to New Brunswick. For the first time we were also able to offer a Rural Go ENG Girl program in Ontario communities that do not have an accredited school or faculty of engineering close by.



2016 BY THE NUMBERS

**1200 GIRLS
ACROSS CANADA**

**878 PARENTS
AND GUARDIANS**

**478 VOLUNTEERS
AND ORGANIZERS**



ENCOURAGING OUR FUTURE COMPUTER AND SOFTWARE ENGINEERS

Go CODE Girl/Allez coder les filles is an exciting experience designed to expose girls in grades 7-11 to the exciting world of computers, coding and software development. This outreach program aims to educate, inspire and equip girls with the digital skills, confidence and resources needed to pursue education in technology, computing and engineering. Jobs in technology, computing and engineering currently represent some of the fastest growing and most lucrative career paths.



2016 BY THE NUMBERS

542 girls

**11 ONWiE members
offered a Go CODE
Girl program**



I think this is a great opportunity to
learn what engineering is all about.

- GO CODE GIRL PARTICIPANT



ENGAGING GIRL GUIDES

Badge Day gives Girl Guides the opportunity to visit an accredited school or faculty of engineering across Ontario and participate in interactive activities to complete the requirements to earn a range of Science Technology Engineering and Math (STEM) badges.

Having engaged 1500 Girl Guides in 2016, this program is modeled after the success of Go ENG Girl and has been coordinated by ONWiE since 2010. Activities are facilitated by engineering student volunteers to leave participants with confidence in STEM and inspiration to keep their options open in high school and beyond.



2016 BY THE NUMBERS

1500 girls

**10 ONWiE members
offered a Badge
Day program**

Before today I thought
engineering was just for boys.



- BADGE DAY PARTICIPANT

Guide

Canada

BANQUE DU CANADA 100

1000



Handwritten signatures and text at the bottom left, including the name "M. B. King" and the words "THE GOVERNOR".

ELSIE MACGILL — A BANKNOTABLE FINALIST

On international Women's day in 2016, the Bank of Canada announced a process to help select a Canadian women who would be featured on one of our future banknotes. Out of the many thousands of preliminary suggestions, Elsie MacGill, a Canadian engineer and the first female aeronautics engineer in the world, made it to the short list of five. This is a remarkable achievement considering all the other great Canadian women who were nominated. In fact Elsie was the only women with a STEM background who was selected as a finalist. ONWiE, with Engineers Canada and other organizations, was instrumental in garnering support for Elsie's nomination as a banknotable women and for providing information about her to the public and engineering communities.

To read more about Elsie and her achievements please visit:

www.therecord.com/opinion-story/7006019-the-next-canadian-woman-on-a-bank-note-should-be-elsie-macgill



RECOGNITION OF ONWiE

In November 2016, the chair of ONWiE, Mary Wells, was selected as one of three finalists for the international Global Engineering Deans Council (GEDC) Airbus Diversity Award from forty nominations around the world. The GEDC Airbus Diversity Award recognizes the people and projects worldwide which have encouraged students of all profiles and backgrounds to study and succeed in engineering.

www.youtube.com/watch?v=f9Um7z3VRPU

ONWiE was also recognized nationally as the winner of the 2016 Natural Science and Engineering Research Council (NSERC) Award for Science Promotion. This award recognizes organizations that make an outstanding contribution to the promotion of science in Canada through activities encouraging popular interest in science or developing science abilities.

MARK YOUR CALENDARS

**GO ENG GIRL/
GENIALES, LES FILLES**
October 14, 2017
October 21, 2017

GO CODE GIRL
February/March 2017

BADGE DAY
January-May, 2017

BEHIND THE SCENES

ONWiE events are supported by a dedicated team of leaders at each campus location. Teams are comprised of engineering students, faculty, staff, and alumni who manage all aspects of the program. This year, these dedicated individuals were joined by over 500 volunteers who helped make the events as exciting and insightful as possible.

THANK YOU!



CARLETON UNIVERSITY

Nikhitha Gajudhur, Christine Ridell, and Karina Karmakar



CONESTOGA COLLEGE

Karen Cain, Nancy Nelson, Karen Kokkelink, and Rebecca Dougherty



LAKEHEAD UNIVERSITY

Heather Moynihan and Meilan Liu



LAURENTIAN UNIVERSITY

Francine Sivazlian



McMASTER UNIVERSITY

Carm Vespi and Linda Coughlin

**QUEEN'S UNIVERSITY**

Scott Compeau, and Michelle Nearing

**ROYAL MILITARY COLLEGE OF CANADA**

Sara Creber

**RYERSON UNIVERSITY**

Nika Zolfaghari

**UNIVERSITY OF GUELPH**

Umna Rashid, and the WISE group at Guelph

**UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY**

Britanny MacFarlane



uOttawa

UNIVERSITY OF OTTAWA

Julie Olivier, Carolyne Savage, Justine Boudreau, Tilly Ndjiapanda

**UNIVERSITY OF TORONTO**

Dominic Abogado, Dawn Britton

**UNIVERSITY OF WATERLOO**

Lyndia Stacey, Caity Dyck, Mary Wells

**UNIVERSITY OF WINDSOR**

Edwin Tam, Mike Konstantino, and Shelly Scurr

**WESTERN UNIVERSITY**

Lesley Mounteer, Joanne Moniz

**YORK UNIVERSITY**

Marisa Sterling, Amy Gaukel, and Gayathry Wright

THANK YOU TO OUR SUPPORTERS

ONWiE gratefully acknowledges the support of our provincial and local supporters.

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