

## **Executive Summary**

The objective of this paper is to understand the history, present and future of engineering in Westernized societies through the perspective of female non-engineers. This paper allows the readers to see how engineering has transformed over the years with a steady increase in the representation of women in engineering. Canada's history of engineering reflects innovation and the ability of engineers to overcome unique challenges, which ultimately led to greater economic growth. The achievements of Canadian engineers are evident all over the country from the canals to aircraft and hydroelectric power stations. The engineering profession has been influenced by various individuals in the western world, such as George Washington who invented various farm tools, Thomas Edison for inventing the light bulb, Nikola Tesla for introducing the modern AC electricity supply system and the Wright brothers for creating the world's first airplane. Although historically engineering has been mostly dominated by male engineers, there are few records of literature that illustrate how women such as Elizabeth Bragg, Ellen Richards, Emily Roebling, and Elizabeth MacGill, have been part of this profession and have made significant contributions to society. Both male and female engineers have shaped the engineering profession, however it continues to be a male dominated industry. Moving forward, the findings of our paper illustrate that it is essential to determine and curb factors which lead to the under-representation of women in engineering. To positively shape the future of engineering, it is important to promote STEM programs especially for females entering the program. Moreover, our key recommendations include addressing under-representation of females, encouraging females to enter the engineering profession through educational initiatives and providing support from both other female engineers and male engineers.