

Mexican woman gets McCall MacBain scholarship for aerospace master's



Before Shalom Carmona became the [only scholarship recipient from Latin America](#) to study for a master's degree in **Aerospace Engineering** in **Montreal, Canada**, she was a recent graduate with an urgent need to work to help her family.

*"I wanted to make money to support my home. I was going to pause **the space subject** that I'm passionate about,"* recalled the 2023 Tec Mechatronics Engineering graduate, who was officially notified on April 30 that she was one of the winners of the 100% scholarship.

However, the Aguascalientes native decided to **take a chance** and apply for the [McCall MacBain Scholarship](#), a program that finances master's degrees, to study at [McGill University](#), considered one of the best in the Land of the Maple Leaf.

*"I didn't want to be left wondering what would have happened if I hadn't tried. I decided to take a risk and say, **'I'm not going to accept that job in Monterrey,'**"* she said.

https://www.instagram.com/p/C6YqhgFuCgL/?igsh=MWtyczR0eWZiZmhrYg%3D%3D&img_index=3

Carmona was **one of 30 people** from countries such as **Rwanda, Kenya, India, and Mexico** who benefitted from the [McCall MacBain Scholarship](#); she will begin her master's degree in August.

She said she aims to move into **flight computer** and rocket automation development.

*"It will be great because in addition to the subjects, we have an **industrial and rotational stage** with other universities in the area. There are three areas you can specialize in, one of which is **avionics and control**. That's an area that I experienced in the rocket team, which deals a little more with electronics," she said.*

Nearly **300 people** were interviewed for the scholarship; **91** were **finalists** and only **30** got the scholarship, of whom 10 were international and Shalom the only one from Latin America.

Shalom is a Monterrey campus graduate. She was part of the **sixth class** of [Leaders of Tomorrow](#), a Tec program that supports young people with a 100% scholarship to study at the institution.

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Science advocate

With courses, **workshops, and classes**, Shalom has impacted children in different regions of the country through scientific communication about **aerospace topics and astronomy**.

*"During my studies at PrepaTec Aguascalientes, I developed my first project, **Robots for Everyone**, using robots. We provided robotics and English classes to a community," she said.*

She started the [STEAM her](#) project together with Professor **Sandra Castillo**, which delivered science, technology, engineering, arts and mathematics classes to girls in a **children's home**.

On campus, she was president of the **Tec de Monterrey Astronomical Society** and promoted two social projects, the first of which was **Cosmonauts**, focused on remote classes for children.

<https://www.instagram.com/p/Cbx0cLFFYSw/>

The second was **Nébula**, which provides in-person astronomy classes to children from two homes.

*"My goal is to provide **opportunities** for others to recognize their potential.*

*“Maybe tomorrow, that boy or girl will remember the class and **it will motivate them to try** (going into STEM areas),” she said.*

She was also a promoter of the **Leader-to-Leader Scholarship** that was created from the commitment to reciprocity and philanthropy of Leaders of Tomorrow students to help more talented students to study at the Tec.

Currently, the Tec graduate provides weekly classes at [Casa Hogar Dulce Refugio A.C.](#) (Sweet Refuge Children’s Home), located in Aguascalientes.

“My goal is to provide opportunities for others to recognize their potential.”

The engineering and robotics journey

Shalom Carmona had **her first contact with robotics** when she was a child, thanks to her participation in a government program.

“I became quite obsessed. I went to [World Robot Olympiad](#) (WRO) competitions in 2014. I read astronomy books and studied courses focused on engineering,” she said.

She joined the **Blue Steel** robotics team at PrepaTec Aguascalientes, where she participated as an **engineering leader, mentor, and driver**.

During her studies on Mechatronics Engineering at the Monterrey campus, **she went to Poland** for a similar mission. There, she simulated situations that could occur in space.

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This took place at the [LunAres Research Station](#), where the student spent three weeks **living as an astronaut** in a real environment.

*“As part of the program, you can also conduct **research**, which was really cool.*

*“I worked on a **hydroponic smart** garden designing 3D parts for lunar soil sample collection,” she explained.*

The Tec graduate is currently part of the **Monterrey Rocket Lab**, a student initiative dedicated to experimental rocketry and propulsion technologies.

*“We’ve competed in Guadalajara and Chihuahua, as well as Brazil. Getting involved in this helps a lot, and working hard on the project is also very **enriching**,” she said.*

Shalom will spend the next **three years** studying for a Master's in Aerospace Engineering at McGill University in Canada.

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