

Space design! Mexican team win international 1st place in NASA contest



The IKTAN Roving team, made up of students from [Tec de Monterrey's Cuernavaca campus](#), won **first place** in the **Overall Winner** and **Ingenuity Award** categories of the 2022 [NASA Human Exploration Rover Challenge](#).

They've become the **first Mexican team** to win **international first place in the university category** of the U.S. space agency's design competition.

The team of **students** from the **School of Engineering and Sciences** won these awards in the school's tenth year of taking part.

"We started in 2013 with a team of just 6 pioneering students and today we are a fully consolidated team with the experience and ability needed to remain at the top of this competition," shares **David García**, team mentor and Cuernavaca campus professor.

IKTAN Roving, which means 'ingenious' in Maya, received the awards on April 29 in a virtual ceremony.

<https://twitter.com/IngenieriasTec/status/1521144936162369536>

The prizes won

The **Overall Winner** award is given to the best **3 teams in the world**, after all **9 competition categories** have been evaluated.

These include **the design and manufacture of the vehicle** (rover), **educational initiatives, safety, and successful travel**.

They also won the **Ingenuity Award**, given to the team with the most **daring and creative solutions to engineering difficulties within their design**.

*“Being part of IKTAN Roving has meant effort, learning, teamwork, and friendship. In short, it’s been an **unparalleled experience that I’ll remember for the rest of my life**,”* said Daniela Espinosa, pilot and member of the manufacturing team.

The NASA challenge

[NASA’s Human Exploration Rover Challenge](#) is one of **seven Artemis Student Challenges** and the space agency’s **only competition accepting international teams**.

For over 25 years, this challenge has sought to encourage the research and development of **new technology** for planning **future manned space missions** to the **Moon, Mars, and other planets**.

The **challenge** is to get the **rover to navigate an obstacle course and complete the mission of collecting** liquid and solid samples **from extraterrestrial terrain**.

*“Every year, we try to implement creative and innovative improvements based on growth areas in previous years, which provides us with **continual progress in our rover design**,”* explains Kelvin Santiago, leader of the manufacturing team.

The [Artemis mission](#) wants to put the **first woman** and the **first African American** on the Moon.

Aquí se muestra el diseño del Rover, en el que se ganó el Ingenuity Award por su diseño innovador e ingenioso.
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The best wins in the team’s history

Participation in the competition from the **Tec’s Cuernavaca campus** has been outstanding in recent years, and it has become one of **the best international teams**, now being ranked the best in the **international category**.

The event has been held virtually since 2020 due to the **COVID-19 pandemic** and because of the **cancellation of in-person activities** at [NASA’s Marshall Space Flight Center](#) in Huntsville, Alabama.

*“**For IKTAN, adversities are opportunities**,”* team leader Miranda González said to CONECTA.

“There were new rules this year, and the team knew how to adapt to them with ingenuity, which was reflected in the results.”

“I’m proud to be part of a team of talented and passionate people, but above all people who are inspiring and aspire to break down barriers,” she added.

“Today, we are a fully consolidated team with the experience and ability needed to remain at the top of this competition.”

Aquí se muestra el equipo Iktan Roving del campus Cuernavaca haciendo pruebas con su Rover.
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A history of awards

Participation by the Cuernavaca campus team has been an **unbroken tradition since 2013.**

Over the last 9 years, they’ve won the following awards:

- *Overall Winner (first place, 2022)*
- *Ingenuity Award (2022)*
- ***Overall Winner*** (second place, 2021)
- *STEM Engagement Award (2021)*
- ***AIAA Telemetry/Electronics Award*** (2014, 2016, and 2020)
- ***“Jesco von Puttkamer International Team Award”*** (2016, 2017, and 2019)
- *“Frank Joe Sexton Memorial Pit Crew Award”* (2017)
- ***“Team Spirit Award”*** (2018)

The IKTAN Roving team

It’s coordinated by the Cuernavaca campus School of Engineering.

- Students

- *Miranda González Cué, project leader*
- *Kelvin Ernesto Santiago Alberto, manufacturing leader*
- *Aarón Pérez Ontiveros, telemetry leader*
- *Eric Adrián Arzate Hernández, tools leader*
- *Jorge Abraham Vega Méndez, sponsorship leader*
- *Sebastián Cruz Espinosa de los Monteros, STEM Engagement leader*
- *Mayra Alitzel Galván Román, STEM Engagement leader*
- *Diana Carolina Escobar Juárez, safety leader*
- *Miguel Ángel García Huerta, seating leader*
- *Brian Ismael Chávez Viveros, track leader*
- *Ian Doring Romo, tire leader*
- *Daniela Espinosa Biosca*
- *Bernardo Salgado Dorantes*
- *Aldo Olascoaga Olmedo*

- *Diane Zenil Lagunas*
- *Erika Itzel Hernández López*
- *Arturo Emiliano Salgado Díaz*
- *Diego Díaz Sosa*
- *Emiliano Vivas Rodríguez*
- *Jorge Luis Monjaraz Hernandez*
- *Diego Alberto Flores Gonzalez*
- *Agustin Aranda Trejo*
- *Armando Arredondo Valle*
- *Brenda Zarate Sandoval*
- *Gerardo Cerecero López*
- *Norma Aretha Martínez Chávez*
- *Josué Romero Rodríguez*
- *Alejandro Hidalgo Badillo*
- *Jorge Emiliano Turner Escalante*
- *Laura Arantzha Santos Flores*
- *Mariana De la Rosa Batalla*
- *Iker Landeros De La O*

- Mentors:

- *David García Suárez*
- *Javier Montiel García*
- *Jesús Eduardo Simental*

<https://youtu.be/2ywrlQmjHeg>

YOU'LL DEFINITELY WANT TO READ:

<https://conecta.tec.mx/en/news/cuernavaca/education/tec-students-win-second-place-nasa-space-design-competition>