



Tecnológico  
de Monterrey

# AERONAUTICS INDUSTRY



## SUMMER

M X

ONE COUNTRY, THREE CITIES

SUMMER  
PROGRAM

2021

Queretaro



Mexico City



Chihuahua

# 4 INVEST WEEKS TRAVELING AROUND MEXICO

from **July 5th** to **July 30th**

The **iSummerMx** Programs are an innovative academic option designed for International students who love traveling and learning about new cultures. They are **four-week long** and were created with an **itinerant schedule**, that is, students will travel to different Tec de Monterrey campuses in different cities. This means that students will learn about different parts of the country without ceasing their studies.

Each Tec de Monterrey campus will organize special activities with field trips, company visits and networking events that will make their experience unforgettable, creating everlasting memories, exercising their intellectual curiosity and developing entrepreneurship, innovation and leadership skills in a multicultural setting.

The programs are based on **experiential learning** so students will learn also outside the classroom by developing real-life collaborative projects with other students.

## Aeronautic Industry Program – Rising Aerospace Industry in Mexico

This program is designed for students interested in acquiring the basic knowledge and skills to venture as young professional in the aeronautic industry.

Students will learn about the aeronautic industry ecosystem, key technological trends and the relevance of this Mexican industry in the international setting.

In this program, students will be challenged to redesign and test an unmanned aircraft. They will also report a business opportunity for a prospective home country firm to participate in the Mexican aeronautic cluster.

The aeronautic industry stands as a key high-tech player in the global economy. It has a substantive impact on the competitiveness and development of entire regions. Stakeholders are constantly

challenged by the industry's strong competition, the need for highly qualified personnel and by a resource-intensive commitment to innovation and research.

In the last two decades, the Mexican aeronautic industry stands out as a great example of growth, foreign investment and job creation. Design and manufacturing companies of aircrafts, engines and other components, as well as maintenance, repair and overhaul firms, integrate the dynamic Mexican aeronautic cluster.

Students will live in three vibrant cities. The colonial city of Queretaro, the industrialized Chihuahua and Mexico City. These cities stand out as examples of growth, foreign investment and job creation, especially in the aeronautic industry.

## Interesting Facts

- The world's largest electrical harness plant is located in Mexico
- Mexico hosts one of the main commercial airplane interior design center. It is based in Chihuahua and belongs to the French group Zodiac Aerospace.
- Besides the USA, the largest turbine engineering design center is based in Mexico. It is part of the General Electric group and it is located in Queretaro.
- You can find the largest Latin American manufacturing center in Mexico. It has more than 1,170 CNC's and belongs to Honeywell.





# CAMPUSES

- **Querétaro:** Campus Querétaro is the fourth largest campus in the country with more than 7000 students, of which 55% are from other states and more than 400 international students from around the world. Queretaro is located in the heart of Mexico, just a two-hour drive from Mexico City. Its great location, modern infrastructure, diversity of people, food and touristic places make the state one of the best destinations to visit. Queretaro is one of the safest, innovative and state-of-the-art sectors in industrial production, education and technology.
- **Chihuahua:** The campus opened its doors in 1976. Being located in the largest state of Mexico, in the northern region of the country, the magnificent scenery and unique combination of mountains, canyons, deserts, waterfalls and fresh clean air provide a spectacular experience. Chihuahua's international presence has grown from its collaboration and work in the aerospace and automotive fields, becoming one of the most important aerospace clusters in Mexico with more than 40 global companies involved.
- **Estado de México (North of Mexico City):** It's one of the largest campuses of Tec de Monterrey. It is located in the municipality of Atizapán de Zaragoza. It offers a privileged location by being near to all major Mexico City's attractions, manufacturing clusters and sights that range from the breathtaking Teotihuacan Pyramids to the amazing buildings of the nearby Reforma area. The campus Engineering faculty is strongly related to the industry.

CAMPUS  
CHIHUAHUA

CAMPUS  
QUERÉTARO

CAMPUS  
ESTADO DE MÉXICO  
(North of Mexico City)

WHY  
i SUMMER  
MX?

STANDS FOR

INNOVATIVE

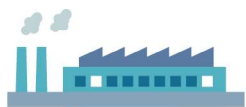
INCREDIBLE

ITINERANT

IDEAL

INTERNATIONAL

Students will be embarked on the educational model **Tec21**, an ambitious university-wide program to rethink education. **iSummerMX** will allow flexibility as to how, when and where learning happens through:



Company visits



Conferences  
with experts



Networking  
events



Trips



# COURSES

Credits per course

3 credits 5 ECTS 8 Tec de Monterrey units

Credit load of the  
program (2 courses)

6 credits 10 ECTS 16 Tec de Monterrey units

Students will learn and advance their skills by taking 2 courses:

## M2004- Aeronautics Fundamentals

(taught in English)

In this course, students will understand and will be able to explain the aerodynamic principles and flight mechanics. They will also learn meteorology concepts, aerial navigation, air travel control and telecommunications as well as the practical principles to carry out a flight.

## M3041- Aeronautical Engineering Project I

(taught in English)

By the end of the course, students will be able to identify the design parameters and requirements that best satisfy the constraints of a multidisciplinary project. A project that integrates knowledge in the areas of mechanics, electronics, control and computing with the goal of finding an optimal solution applied to the aeronautical domain.