



Tecnológico
de Monterrey

AUTOMOTIVE ENGINEERING



SUMMER
OF
2021

SUMMER PROGRAM 2021

ONE COUNTRY, FOUR CITIES

Monterrey

• San Luis Potosí

• Toluca

• Puebla

4 SPEND WEEKS TRAVELING AROUND MEXICO

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

The **iSummerMX** programs are an innovative academic option designed for International students who love 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 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.

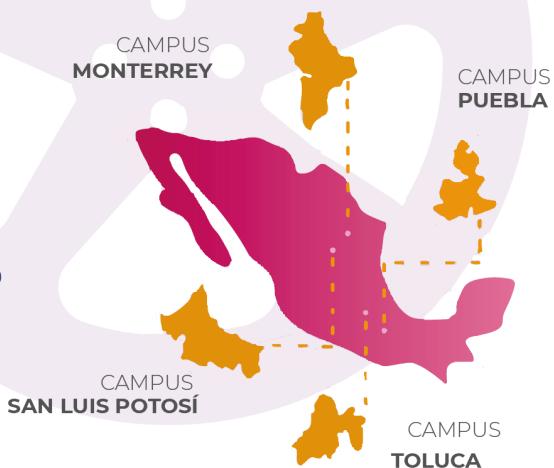
Automotive Engineering Program

This program is designed for international students interested in acquiring the basic knowledge and skills to venture as young professionals in the automotive industry field. Who like traveling and working in multicultural environments

During the program, students will be visiting four of the most important cities in the country, where they will live experiential learning, favoring cross-cutting skills and technical competences. Monterrey, the second most industrialized city in the country. San Luis Potosi, city that leads the country in foreign direct investment in the automotive development sector. Toluca, with the most complete on-campus automotive laboratory in the country. Puebla, the fourth most important city in Mexico and home of a wide auto part-maker cluster.

CAMPUSES

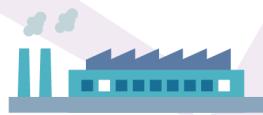
- Monterrey:** The main campus is located in a modern industrial and business center only 230km far from the USA border. The city, also known as "La Ciudad de las Montañas" (City of the Mountains), hosts a set of transnational conglomerates with 10 out of 20 of the most important Mexican firms. The Campus has been designed to create the perfect environment motivating the engagement with intense academic activity and research as well as recreation, and allowing the full innovative and entrepreneurial potential to flourish.
- San Luis Potosí:** The Campus opened its doors in 1975. The city of San Luis Potosí (SLP) is in the eyes of the world because of its wide array of biodiversity from the famous Huasteca region, a veritable rainforest, to dry, arid flatlands in the north of the state. SLP has a modern logistics platform, one of the most advanced in the country, making the city the preferred hub in Mexico for multinational companies. The state's economic activities are heavily focused on the automotive industry. Around 35% of the 2500 automotive providers in Mexico are based within 300 km of SLP. It is estimated that the state of SLP will be among one of the top states in Mexico in the production of light vehicles.



- **Toluca:** It opened its doors in 1982. It is located in the city of Toluca, only 60 km from Mexico City. Due to its proximity and prestige, this campus plays an important role in the labor field since it is located in one of the largest industrial areas nationwide, with special development in the automotive industry.
- **Puebla:** Located in one of the best districts of the city, opened its doors in 2003. On 25 hectares, you will find excellent facilities with classrooms equipped with state-of-the-art technology as well as cafeterias, gymnasium, fields and courts to practice your favorite sport. The city of Puebla is located 1 hour away from Mexico City, which makes this campus very attractive for students who wish to travel without having to move great distances.



Students will be embarked on the educational model **Tec21**, an ambitious university wide program to rethink education. Visits to the most important automotive manufacturing plants in Mexico in the company of inspiring professors with a recognized trajectory in the automotive industry. **iSummerMX** will allow flexibility as to how, when and where learning happens through:



Company visits



Conferences with experts



Networking events



Trips

ITINERANT

INNOVATIVE

INTERNATIONAL

INCREDIBLE

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:

M3011 – Principles of Automotive Engineering (taught in English)

The course objective is directed to know the principles of automobile operation. It is an advanced level course, which intends the student to know and apply the principles of automobile operations. Requires basic knowledge of mechanics, dynamics and combustion of engines. As a result of the learning, the student will develop a basic knowledge of mechanical and automotive engineering.

M3018 – Mechanical Engineering Capstone Project (taught in English)

In this advanced course, students will complete industrial, scientific, technological and sustainable development engineering projects using the knowledge acquired in the final third of their major. This course requires prior knowledge of design methodology, manufacturing processes, mechanical design, engineering, economics, heat transfer mechanisms, and automatic control systems. As a learning outcome, students will be able to solve real mechanical engineering problems that will benefit the industrial sector and society and minimize environmental degradation.