

Education at the Tec: Acquiring skills in real-world settings



Just five weeks into their university studies at [Tec de Monterrey](#), Natalia, Rocío, Renata, and Yuri found themselves in front of Kellanova's directors.

The team had **developed an app in one of their classes** that uses **augmented reality** to enable customer interaction with their cereal brands.

This illustrates one of the **main characteristics of education at the Tec**: learning by solving challenges, often in collaboration with **companies, civil society organizations, and governments**, known as [Training Partners](#).

*“The **Educational Model** focuses on **acquiring competencies**. It’s an innovative educational approach because these **competencies** are **developed in real-life settings**,”* explained Rafaela Diegoli, Academic Vice-Rector of the Tec.



/> width="900" loading="lazy">

“Our professors told us: ‘Be disruptive, think outside the box,’ which led us to focus on finding a differentiator for our proposal,” said Rocío, part of the winning team in ‘The Role of Business in Society’ challenge, a first-semester activity at the Tec’s School of Business.

Their proposal included the use of **artificial intelligence, project management, and analytical skills**, winning them the prize.

This illustrates **how learning is experienced** at the Tec, Diegoli said. Although each **study program** has its own **graduation profile** with **specific disciplinary competencies**, the **Tec’s educational system** seeks to **broaden students’ competencies**.

“Cross-cutting competencies are those shared across all fields, which provide the distinctive Tec de Monterrey seal,” notes the Academic Vice-Rector.



/> width="900" loading="lazy">

In contrast to other educational proposals in Mexico and globally, Tec students can **personalize their education** through stages that allow them to **explore, focus, and specialize**.

Beyond the academic aspect, it also offers a **memorable university experience** through sports, arts, leadership, and holistic wellbeing activities.

This **distinctive approach to learning at the Tec** was implemented in 2019. To date, **18,755 students have graduated** under this model.

The **application and improvement of the teaching process** have produced several outcomes, notably that the **June 2024 graduating class** achieved the **highest level of employability**, with 89% employed within three months of graduation.

Discover more about the learning process at Tec de Monterrey:

1. [Learning that develops through real-world challenges.](#)
2. [Opportunities for specialization](#)
3. [Education and guidance](#)
4. [How technology is leveraged](#)
5. [A memorable and comprehensive university experience](#)

1. Learning that develops through real-world challenges

At the Tec, the teaching-learning process is centered on addressing real-world challenges.

Tec professors are the ones who create these **active learning environments and design challenges** to foster the acquisition of both **disciplinary** and **cross-cutting competencies**.

The **faculty collaborates with companies, organizations, and governments** to create these challenges, often approaching them from multiple perspectives.



/> width="900" loading="lazy">

*“Addressing **real-world challenges** involves facilitating education from **multiple disciplinary perspectives**, highlighting how these disciplines **interact to solve challenges**,”* notes the Academic Vice-Rector.

Over the years, more than **2,500 partners** have participated, with **66%** of them **being among the top 10 employers in Mexico**.

*“This approach has an **impact on the employability of our students** and their entry into the job market, as they work on real-world projects and receive feedback from the **very first semester**,”* said **Diegoli**.

-Cross-cutting competencies acquired by Tec students

*“Previously, value lay in what you knew; today, it lies in **what you can do with that knowledge, in learning to learn and adapting quickly**,”* David Garza, Executive President of the

Tecnológico de Monterrey Education Group, pointed out in an interview with CONECTA.

Consequently, the Tec seeks to ensure that its students **possess not only the competencies of their chosen discipline**, but **also the following cross-cutting competencies**:

- **Self-awareness and self-management**: *This is the foundation of leadership, enabling students to better understand themselves and lead others effectively while adding value.*
- **Ethical and civic commitment**: *This allows students to develop and implement projects that transform the environment for the benefit of all.*
- **Communication**: *Relating effectively by employing various languages, resources, and strategies tailored to the context.*
- **Innovative entrepreneurship**: *Generating solutions that provide value to society.*
- **Social intelligence**: *This enables students to build effective collaborative environments in multicultural contexts.*
- **Reasoning for complexity**: *Thinking outside the box and daring to look beyond.*
- **Digital transformation**: *Tackling professional challenges by incorporating cutting-edge digital technologies.*

<https://conecta.tec.mx/en/news/national/education/7-skills-tec-wants-teach-its-students>

2. Opportunities for specialization

Las y los estudiantes de Tec tienen la opción de **desarrollar habilidades** que estén relacionadas **con sus pasiones, intereses y planes profesionales**.

Al cursar su **Semestre Tec** se involucran en **actividades a nivel local, nacional o internacional**. Se puede vivir a través de:

- *Concentración para una especialidad o complementaria.*
- *Prácticas profesionales.*
- *Estancias de investigación o de innovación y liderazgo social*
- *Incubación de una empresa.*

3. Education and guidance

Tec professors serve as **learning facilitators**, going beyond teaching content and procedures to **guide students in applying their knowledge to solve real-world challenges**.

*“Many **challenges are multidisciplinary**, so our professors, each from their respective specialties, **work collaboratively to help students integrate this content**,” Diegoli said.*

*“Additionally, the **faculty** plays a crucial role in developing skills that support our students’ personal and **professional growth**,” he added.*

In addition, a **support** system is in place to ensure that students, from the moment they enter the Tec, feel part of a community that helps them discover their purpose and talents.

The **Admissions** and **Program Director** provides guidance on academic decisions throughout the student's journey, while **the Student Mentor** supports the development of various aspects of student wellbeing.

El mentor Mauricio García saca una selfie tras terminar la clase Mi plan de vida en el Tec /> width="900" loading="lazy"> **4. How technology is leveraged**

Technology plays a key role in the evolution of the Tec's teaching and learning process.

*"It has evolved to include **greater integration of technology**, artificial intelligence, and personalized learning, while our curricula remain flexible enough to adapt and incorporate emerging topics,"* explained Diegoli.

Artificial intelligence is being utilized to personalize learning, deliver real-time feedback, and enhance teaching efficiency.

*"Many professors are actively working on **integrating artificial intelligence** into their teaching practices.*

*"Mastering the **fundamentals of artificial intelligence** and acquiring practical skills for its application across diverse industries is vital for our students,"* remarked the Academic Vice-Rector.

5. A memorable and comprehensive university experience

Beyond the academic aspect, the Tec **prioritizes comprehensive education and fosters a memorable university experience.**

LiFE (Student Leadership and Education) plays a key role in fostering **cross-cutting competencies**, ensuring all students benefit from this integral development.

"Education over the last 200 years has centered around knowledge, which is something machines will inevitably excel at.

*"So, what should we be teaching? **Values, meaningful relationships, caring for others, teamwork, along with greater emphasis on art, sports, music, and painting,**"* explained Luis Raúl Domínguez, Dean of Student Leadership and Education.

The goal, he explains, is to encourage **students to fully immerse themselves in university life rather than simply attend**; to make the most of all the opportunities for growth as part of their holistic education.

If you want to find out more about **how to learn** at **Tec de Monterrey**, please visit this [section](#).

YOU'LL WANT TO READ:

<https://conecta.tec.mx/en/news/national/institution/tec-de-monterrey-has-4-disciplines-global-top-50-and-ten-top-100>