Tecnológico de Monterrey



IM

B.S. in Mechanical Engineering

Drive the design of a future in motion.

Why study this degree at Tec?

From your very first semester, you immerse yourself in creating solutions that transform industries. Here, you don't just learn how to design—you innovate with purpose.

- **Design systems, master simulation tools, use advanced materials, and integrate advanced manufacturing.**
- **Lead the technological revolution in key sectors such as automotive, aerospace, energy, and more.**

Is this your path?

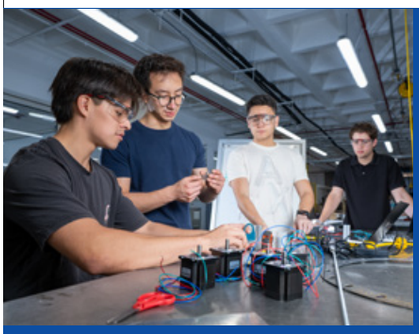
Are you passionate about system design, physics, mechanics, and emerging technologies? Do you dream of creating vehicles, aircraft, or sustainable production processes?

IM at Tec is your platform to make it happen!

Imagine this:

Designing components for a spacecraft. Developing electric vehicles with advanced materials. Creating industrial processes using digital manufacturing and artificial intelligence.

At Tec, that future starts today.



What makes this degree unique at Tec:

- More than 70 years of leadership in engineering education.
- Concentrations in strategic sectors such as aeronautics, automotive, biomechanics, Industry 4.0 technologies, and more.
- State-of-the-art laboratories for design, simulation, and manufacturing.
- Dual degree programs with DHIK (Germany) and study stays at universities such as MIT, McMaster, or Chalmers.
- Real-world projects with companies like Ford, Audi, GE Aerospace, Valeo, John Deere, and Siemens.

Your career field is full of possibilities. Some of them include:

- Automotive, aerospace, metalworking, energy, home appliances, and many other industries.
- Design and innovation centers, technological research, advanced manufacturing.
- Technical consulting, project leadership, or technology-based entrepreneurship.





Skills you will develop:

- Designing systems, processes, and components with a sustainable vision.
- Integrating technologies in manufacturing, energy, and automation.
- Solving complex problems with an analytical, ethical, and multidisciplinary approach.
- Communicating technical ideas clearly in global contexts.

You'll be part of something bigger:

#83 worldwide in Mechanical Engineering and Manufacturing (QS 2026)

Dual degrees and study stays with MIT, Chalmers, McMaster, and more

Real-world challenges with John Deere, Continental, and Ternium

Check which campuses offer this program at tec.mx

The voices of those already making an impact:

Dr. Alejandro Block, leading researcher in renewable energy.

Miguel Mendoza, CEO and member of the Mechanical Engineering Advisory Board.

Pablo Núñez, founder of the student group Elyos Racing Team.

Dr. Joel Huegel, distinguished professor and reference in mechanics.

A glimpse of how our community makes an impact with its talent.

Design change. Here, you learn how to set it in motion.

Take the first step toward the engineering that transforms.

Tecnológico de Monterrey

Curriculum
B.S. in Mechanical Engineering

1ST SEMESTER
- Elective Course Mathematics and Science
- Differential and Integral Calculus
- Biology and Sustainability
- Algorithmic Thinking
- Innovative Perspectives in Engineering
- The Laws of Motion and Conservation
- Tec Week: Induction to the Social Service
- Tec Week Elective I

2ND SEMESTER
- Elective Course Humanities and Fine Arts
- Multivariable Calculus
- Linear Algebra
- Chemistry Fundamentals
- Exploration Topic
- Statistics and Data Handling
- Fundamentals of Thermodynamics
- Foreign Language
- Tec Week Elective II
- Tec Week Elective III

3RD SEMESTRE
- Elective Course Social and Behavioral Sciences
- Fundamentals of Mechanics
- Differential Equations
- Electrical Machines
- Electricity and Magnetism
- Applied Electrical Circuits
- Fundamentals of Engineering Design
- Tec Week Elective IV
- Tec Week Elective V

4TH SEMESTRE
- Elective Course Leadership, Entrepreneurship and Innovation
- Mechanism Design
- Mechanical Vibrations
- Thermodynamic Processes
- Manufacturing and Materials
- Mechanics of Materials
- Disciplinary Tec week
- Tec Week Elective VI

5TH SEMESTER
- Elective Course Ethics and Citizenship
- Materials Engineering
- Fluid Mechanics
- Design of machine elements
- Thermal Machines
- Tec Week: Professional Life Planning
- Tec Week Elective VII

6TH SEMESTER
- Projects evaluation
- Instrumentation and Control
- Heat Transfer
- Manufacturing Technology
- Processes Automation and Control
- Tec Week Elective VIII
- Tec Week Elective IX

7TH SEMESTER
TEC SEMESTER

You'll be able to customize your career through:
- Concentrations
- Internships
- International experience
- Elective training units

- Tec Week Elective X
- Tec Week Elective XI

8TH SEMESTER
- Mechanical Integration
- Elective Multidisciplinary Professional
- Tec Week: Strategies and Guides for the Final Degree Exam
- Tec Week Elective XII

● You'll be able to customize your learning experience by choosing from the different available options.

*The curriculum may vary. Contact an admissions advisor or visit **tec.mx** for more information.

Want more info?

Scan this QR to know more about this program.
tec.mx/im

Your future in MECHANICAL ENGINEERING starts here.

WHY NOT?

RVOE: DEC-520912