

# INNOVATION AND INDUSTRY 4.0

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## What is industry 4.0?

We are at the beginning of a revolution that is transforming traditional production processes, creating new business models and generating new basis of competition in the market.

The productive world we know has been defined by three technological evolutions:



**1st**

Steam machine,  
mechanical  
equipment.



**2nd**

Mass production  
plants, electricity.



**3rd**

Information systems,  
internet,  
automated production.



**4th**

Industrial revolution:  
Cyber system  
physicians.

The Revolution 4.0 is the interaction of cyber-physical system to create autoadjustable, intelligent, flexible, and efficient processes through the digitalization of the productive process, from its design to its consumption.



Steam  
machine



Mass  
production



Internet  
tecnology



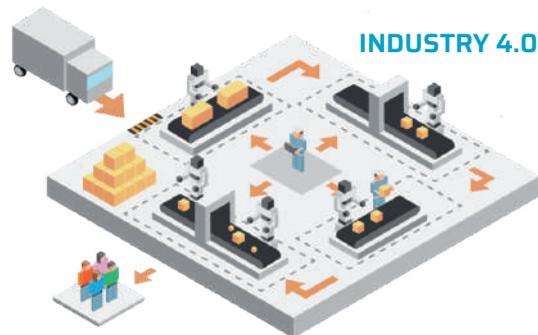
Internet of  
things

We are moving towards an economy "on demand", with a efficient production, low volume and high flexibility.



We will go from independent manufacturing cells to a complete integrated information flow.

We will go from an economy of property, to one in which the sharing of goods will demand new and innovative business models.



## “Nuevo León 4.0” Initiative

The idea is to form an ecosystem of collaboration between government, universities, companies, and researchers that make a difference in industry.

### **Government:**

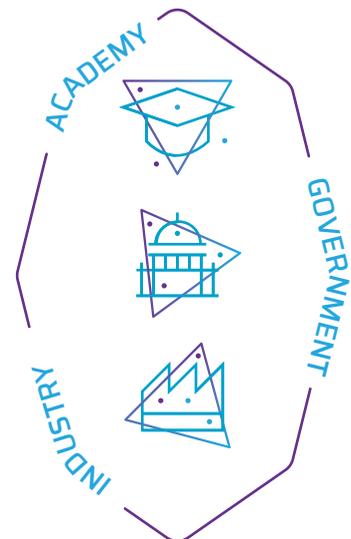
Conditions and terms to adopt technology.

### **Academy:**

Development of knowledge, technology, and specialized human resources.

### **Industry:**

Infrastructure and development of technology, investment, and new projects.



## “Nuevo León 4.0” model





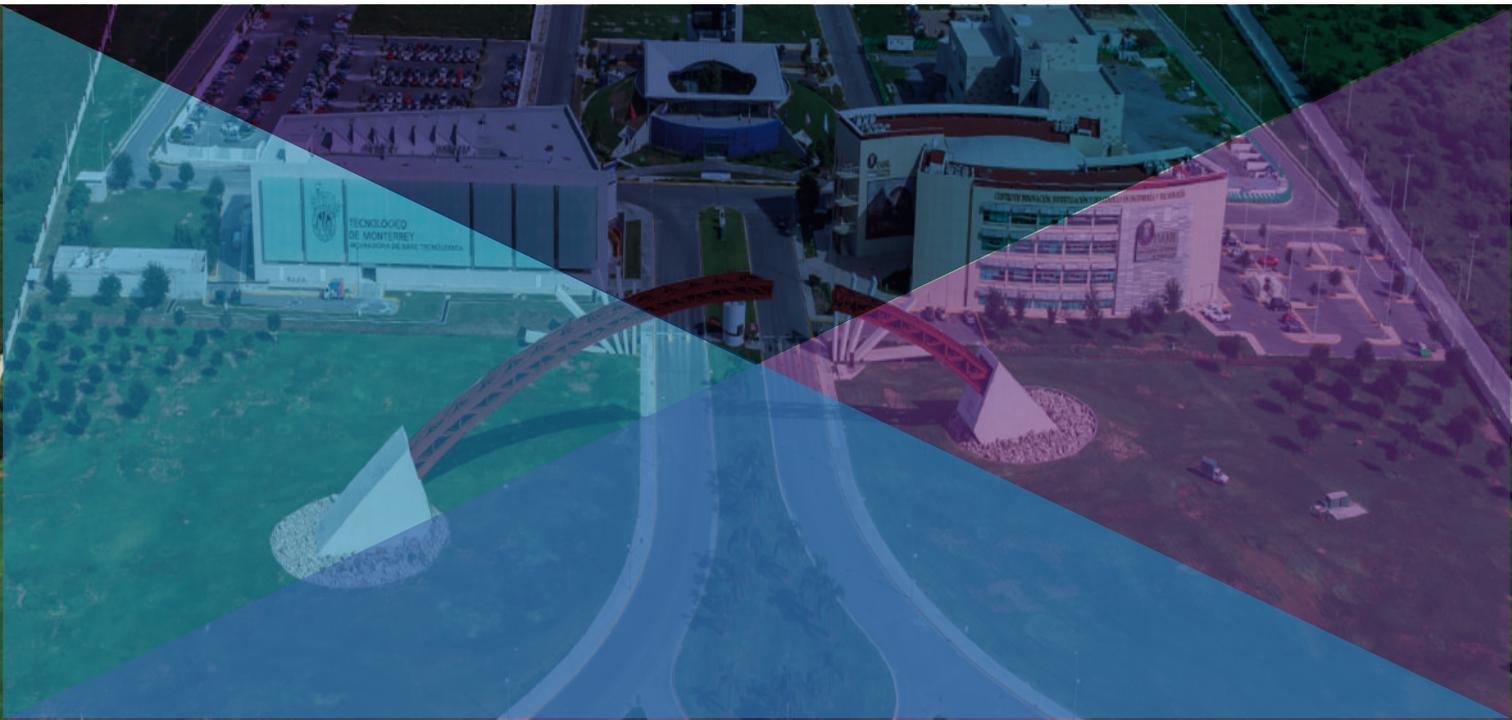
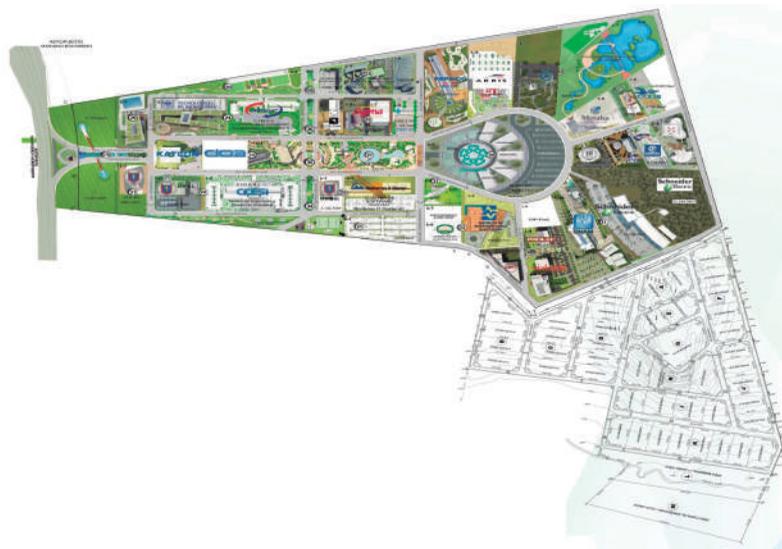
Lab industry 4.0 , UERRE, Nuevo León.

## Special program on science, technology and innovation

### Technological Research and Innovation Park (PIIT)

#### OBJECTIVES:

- Strengthen the capacity to develop scientific and technology infrastructure.
- Strengthen the capacity to develop and attract technology based enterprises.
- Strengthen the capacity to generate R+D projects for social and market solutions.
- Strengthen capacity to develop talent and human resources.
- Publicize the impact of science, technology and innovation in the economic and social development of the state and the country.





UANL

UNIVERSIDAD AUTÓNOMA DE NUEVO LEÓN



FIME

FACULTAD DE INGENIERÍA MECÁNICA Y ELÉCTRICA



CENTRO DE INVESTIGACION  
E INNOVACION EN INGENIERIA  
AERONAUTICA

UANL  
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**Center for Research and Innovation in Aeronautical Engineering (CIIIA).**

**Located in the Del Norte Airport in Nuevo León, Mexico.**