

ELS > Specialization in Logistics and Supply Chain

# **ELS**Specialization in Logistics and Supply Chain (Edition 2011)

Obligatory courses								
Code	Name	CL	U	CA	UDC			
AD4001	Statistical Analysis in Organizations	3.5	12	3	3.5			
AD5003	Value Creation, Business and Network Models	3.5	12	3	3.5			
GI5021	Professional Certification	3.5	12	3	3.5			
IN5096	Transportation and Third Party Logistics	3.5	12	3	3.5			
		14	48	12	14			
Elective Courses								
Code	Name	CL	U	CA	UDC			
OP5053	Elective I	3.5	12	3	0			
OP5054	Elective II	3.5	12	3	0			
OP5055	Elective III	3.5	12	3	0			
		10.5	36	9	0			

### **Program and Learning Outcomes**

### **General Program Objectives**

The Logistics and Supply Chain Specialization program aims to prepare specialists who use their leadership in an organization to:

- Improve an organization's competitiveness through innovations in supply chain manage- ment.
- Optimize an organization's logistics and supply chain processes through technological and administrative innovations.

## **Learning Outcomes**

On completing the program, students will be able to:

- Design supply chains, addressing the issues related to the location of facilities, transportation of goods, routing and inventory management.
- Strategically and efficiently manage the organizational and technological resources in the supply chain.
- Diagnose and solve supply chain management problems.
- Design efficient return flow collection models to collaborate with environmental conservation.

### **Target Audience**

Graduates from engineering or B.A. undergraduate degrees who are conversant with probabil- ity and statistics and operations research. Decision makers in the areas of logistics, such as transportation, routing and purchasing, among others.

### **Program Outcomes**

### Justification:

The specialization in Logistics and Supply Chains is justified given the need to use resources efficiently in the supply chain areas, while considering sustainability and IT use from a global, integrating and collaborative perspective.

Current organizational challenges include the identification of strategic worldwide partners, competitive globalized markets, energy costs and market demands, as well as increasingly complex organizations.

Therefore, Logistics and Supply Chain specialists contribute decisively to the development of the highly specialized talent demanded by companies with the capacity to design, implement and lead initiatives that have a high impact on generating added value in their operations.

According to the document "Evaluation of Supply Chain Performance in Mexico, Generation of National Indicators" generated on the basis of the study conducted by ATKEARNEY and sponsored by the Ministry of the Economy and the Council of Supply Chain and Management Professionals, the greatest impact on service indicators comes from strengthening education processes and, in the industrial sector, strengthening the training processes of the supply chain actors has been declared a priority.

In the Logistics Performance Index 2007, México is ranked 56 out of 150 countries, thus revealing the need for specialists in this area who will be able to enhance the nation's competitiveness and economic development. The result of this was the strategy contained in the National Development Plan 2007-2012 of fomenting an increase in the training of human capital with logistic service capacities.

The Ministry of the Economy, on its page devoted to logistics in Mexico (http://www.elogistica.economia.gob.mx) states "Together with the economic development of a country, its geographic position, technological advancements and other advantages, the talent of human capital has been a decisive factor to achieve competitiveness. The field of logistics has extensive areas of opportunity in human resource training that can undoubtedly be covered by educational institutions...."

Tecnológico de Monterrey, aware of the need to train logistics specialists, offers the specialization in Logistics and Supply Chains as an option to prepare human talent who can drive the competitiveness of the country by enhancing the supply chain management processes.

### Objectives of the specialization:

The Logistics and Supply Chain Specialization program prepares specialists so that in their careers they will be able to:

- Improve an organization's competitiveness through innovations in supply chain management.
- Optimize an organization's logistics and supply chain processes through technological and administrative innovations.

### Learning outcomes:

On completing the program, students will be able to:

- Design supply chains, addressing the issues related to the location of facilities, transportation of goods, routing and inventory management.
- Strategically and efficiently manage the organizational and technological resources in the supply chain.
- Diagnose and solve supply chain management problems.
- Design efficient return flow collection models to collaborate with environmental conservation.

# Campus that offer this program

Campus	Number of periods offered	From	Closed for new students
Ciudad de México	Complete	Trimester Sep - Dec 2011	Trimester Sep - Dec 2022
Estado de México	Complete	Trimester Sep - Dec 2011	
Santa Fe	Complete	Trimester Sep - Dec 2011	Trimester Sep - Dec 2022
Toluca	Complete	Trimester Sep - Dec 2011	Trimester Sep - Dec 2022

Last update: 18/August/2022

### Graduate Requirements

To obtain a specialty degree, a master's degree or Ph. D. degree at Tecnológico de Monterrey, students are required to:

- 1. Have completely finished the undergraduate cycle prior to passing the first course in the curriculum of the specialty, master program, medical residency, or doctoral program.
- 2. Have fulfilled, in compliance with existing standards, the academic prerequisites of the corresponding program, through proficiency tests or the corresponding remedial courses.
- 3. Have obtained a bachelor degree--with the antecedent of high school or its equivalent—that is equivalent to those offered by Tecnológico de Monterrey.
- 4. Have covered all the courses in the given curriculum, either by passing the courses at Tecnológico de Monterrey or by obtaining revalidation or equivalence agreements—in compliance with the standards—corresponding to part of the courses taken at other institutions, and passed the remaining courses at Tecnológico de Monterrey. Courses taken at foreign universities with which there are agreements are considered, for the effects of this article, as courses taken at Tecnológico de Monterrey, as long as they do not exceed a set percentage of the curriculum established by each graduate program.
- 5. In those curricula that so specify, to have prepared a research project or thesis that, having been defended before an academic committee, has been approved by said committee.
- 6. Have taken at least the equivalent of the second half of the corresponding curriculum at Tecnológico de Monterrey, in the case of students with revalidation or equivalence agreements at this level. Flexibility may be exercised in this standard in graduate programs that, under agreement, may be established jointly with other universities.