

## CONTACT

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## PARTNER WITH A COOPERATION AGREEMENT

vicomtech  
ik4 research alliance

TCC  
Guzotekako Geroak  
Cinco años de experiencia  
Luzeko geroak

d-bus

euskotren

dinaycon  
SISTEMAS

metro bilbao

10 años  
mlc-its-euskadi  
Clúster de movilidad y logística  
Madrilgo mugierak eta logistika sistemak

PESA

Posalako Portua  
Puerto de Pasala  
Pasaia, Pasaia Agintaria  
Santitas Pasaia de Pasala

Donostiako Udala  
Ayuntamiento de  
San Sebastián

transitia

ALGEPOSA

adif

ets

indra

B  
Bilbao  
UDALA  
AYUNTAMIENTO

idom



Universidad  
del País Vasco

Euskal Herriko  
Unibertsitatea

# MDe

Master eta Doktorego Eskola  
Escuela de Máster y Doctorado  
Master and Doctoral School



# MASTER IN TRANSPORTATION SYSTEMS

[www.ehu.eus](http://www.ehu.eus)

[www.ehu.eus/mastersistemastransporte](http://www.ehu.eus/mastersistemastransporte)



## INTRODUCTION & OBJECTIVES

Transport systems are vital in today's society. Their sustainable management is a complex issue in which technical, economic and environmental aspects are integrated. For this purpose, new technologies as mobile APPs indicating how much time is left before the bus arrives, GPS device indicating its position or the smart card payment system, are essential tools (Smart Transportation, Smart Cities). In addition to these technological changes, there is a rising global market moving goods and people worldwide.

All this results in an increasingly sophisticated Transport Systems demanding professionals with a multidisciplinary training in this area.

## ENTRY PROFILE

The program is intended for graduates in technical disciplines (engineering and computing) or fields close to logistics and business management.

It is compulsory to have a minimum English level of B2 (FCE).

## CAREER OPPORTUNITIES

Companies developing technological devices or implementing management solutions based on new technologies (Smart Transportation, Intelligent Transportation Systems).  
Logistics and transport operators (freight and passengers).  
Consultancy for planning, development and maintenance of transport infrastructure. Environmental impact consultancy  
Administrative or government positions concerned with mobility and transport.  
PhD studies.

## ABOUT THE COURSE

**Teaching place:**  
School of Engineering of Gipuzkoa (San Sebastian).

**Web site of the master:**  
[www.ehu.eus/mastersistemastransporte](http://www.ehu.eus/mastersistemastransporte)

**Teaching type:**  
On-site.

**Teaching language:**  
English and Spanish.

**Approximate fees:**  
1.950-2.150 €.

**Calendar:**  
October-July.

## TRAINING SYLLABUS English (E) / Spanish (S) / Basque (B)

Subject	Language	ECTS
<b>Compulsory courses</b>		
• Innovation management in the area of Transport	E	3
• Introduction to Transportation Systems	S	6
• Principles of transport modelling	E	4,5
• Probability and statistics concepts and tools applied to Transport	E	3
• Quality improvement systems and models in the area of Transport	E	3
• Transportation Systems: regulation of transport policy and planning, regulation of contracting, environmental protection measures and their enforcement	S	4,5
• Transportation Systems: Transport Policy and Infrastructure	S	6
• Research methodology	E	3
<b>Practical Training (compulsory)</b>	E/S	6
<b>Optional courses (9 ECTS)</b>		
• Communication architectures for ITS services	E	4,5
• Computational intelligence in the area of Transport: data mining and optimisation heuristics	E	4,5
• Positioning, communication and digital mapping systems	E	4,5
• System dynamics	S	4,5
<b>Master's Thesis</b>	E/S/B	12

## TEACHING LOAD

<b>Compulsory subject courses</b> 39 Credits ECTS	<b>Optional subject courses</b> 9 Credits ECTS	<b>Research Projects</b> 12 Credits ECTS	<b>Total</b> 60 Credits ECTS
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