Short course on

“Mobility in Smart Cities”

WHERE:
BarcelonaTech – Technical University of Catalonia
Jordi Girona 1-3, building B1, class 003
Barcelona

SCHEDULE:
09:00 to 13:30h.
Visits to Barcelona’s Traffic control center, Bus control center, Metro’s control center and Bicing’s center are planned during the afternoons.

TRANSPORTATION:
Line 3 (green) metro, Zona Universitaria station.

www.bestbarcelona.org
www.cenit.cat

ADDRESS TO:
students interested in smart mobility

REGISTRATION:
Visit BESTbarcelona.org for more information and send your mail to barcelona@best.eu.org.

The course will be taught in English.
Presentations (in English) will be provided.

Organizes:

In collaboration with:

September 17-21, 2012

Mobility in Smart Cities

BarcelonaTech
Short course on

MOBILITY IN SMART CITIES

This course is included in Barcelona’s Save and Sustainable Mobility’s Week, and will analyze mobility as an important part of any Smart City, that is, how people and goods overcome distance and time in a city (and metropolitan area) in an efficient way and with the help of real time information provided by sensors and IT.

The city is considered as a service providing system that “manufactures” mobility supply to satisfy demand (people or goods) needs, which in turn are subject to perception filters. Information Technologies provide a lot of information, currently in real time, that can help to optimize the management of such a system.

A Smart City is sensorized but in a way that is useful to mobility: the adjective “smart” or Intelligent Transport Systems (ITS), is shared by strategic (infrastructures), tactical (vehicles) and operational (IT) decisions.

Many innovations in urban mobility that are feasible with low cost sensors, smart phone positioning and tracking, will be presented after analyzing the physical/functional, economic and behavioral principles of urban mobility. When talking about mobility, especially talking about smart mobility, we should stay with our feet on the ground.

Francesc Robusté
Professor of Transportation, BarcelonaTech
Director of CENIT

PROGRAM

September 17, 2012
9.00 Design and operation of smart public transport
   Miquel Estrada, CENIT-BarcelonaTech
11:00 Break
11:30 Traffic management in smart cities
   Francesc Soriguera, CENIT-BarcelonaTech

September 18, 2012
9.00 Smart Urban Mobility-Innovations in Barcelona
   Francesc Robusté, CENIT-BarcelonaTech
11:00 Break
11:30 Simulation tools for a smart mobility
   Jaume Barceló, CENIT-BarcelonaTech

September 19, 2012
9.00 Urban economics and value pricing
   Sergi Saurí, CENIT-BarcelonaTech
11:00 Break
11:30 Sensors for better mobility
   Antoni Brey, Urbiotica

September 20, 2012
9.00 Planning Smart Cities
   Willy Müller, Barcelona Regional agency
11:00 Break
11:30 Financing of urban mobility projects in Europe
   Mateu Turró, CENIT-BarcelonaTech

September 21, 2012
9.00 Urban Mobility Plan and Agreement in Barcelona
   Adrià Gomila, Barcelona City

Speakers

Jaume Barceló is Professor of Operations Research and Scientific Director of IT and Mobility at CENIT. PhD in Physics and Director of the Master in Logistics, Transport and Mobility. Developer of AIMSUN mobility microsimulation software.

Antoni Brey is Telecommunications Engineer with graduate degree in Advanced Studies in Theoretical Physics. Board member of the Professional Telecommunications Engineers CEO of Urbiotica.

Miquel Àngel Estrada is Dr. Civil Engineer. Assistant Professor at BarcelonaTech and Project Manager of CENIT. Specialist in logistics and public transport operations. Visiting Scholar at the Rensselaer Polytechnic Institute and the City University of New York.

Adrià Gomila is Industrial Engineer with graduate degree in Planning and Mobility Management. Associate Professor at BarcelonaTech (2006-2009). Director of Mobility Services of Barcelona.

Francesc Robusté is Professor of Transportation and Director of CENIT. PhD in Engineering, MSc in Operations Research and MEng in Transportation by UC Berkeley. President of the Spanish Transport Engineering Association.

Willy Müller is Dr. Architect. Founder of WMA (Willy Muller Architects, 1996) and cofounder of Metapolis Group (2000). CEO of Barcelona Regional.

Sergi Saurí is Dr. Civil Engineer and Economist. Assistant Prof. at BarcelonaTech and Project Manager of CENIT. Specialist in microeconomics and port operations. Visiting Scholar at the Massachusetts MIT (2008).

Francesc Soriguera is Dr. Civil Engineer. Assistant Professor at BarcelonaTech and Project Manager of CENIT. Specialist in traffic. Visiting Scholar of UC Berkeley.

Mateu Turró is Professor in Transport and Territory and Scientific Director of Financing at CENIT. PhD in Civil Engineering, and MSc in Transportation by the University of Michigan. Most of his professional career was developed in the European Investment Bank.