



# Urban Logistics : understanding, modelling and simulating urban-freight



## PROGRAM

	MON 19 <sup>th</sup> MAR CLASSROOM L218	TUE 20 <sup>th</sup> MAR CLASSROOM L218	WED 21 <sup>st</sup> MAR CLASSROOM L218	THU 22 <sup>nd</sup> MAR CLASSROOM L218	FRI 23 <sup>rd</sup> MAR CLASSROOM L218
09h00 10h30	<b>GENERAL INTRODUCTION</b>  S. TAMAYO (MINES)	<b>INTRODUCTION TO SIMULATION</b>  D. TOBAR (MINES)	<b>LCV CHALLENGES</b>  P. EYKERMAN (RENAULT)	<b>INTERACTIVE SIMULATION</b>  A. GAUDRON (MINES)	<b>FIELD EXERCISE PRESENTATION</b>  S. TAMAYO, A. GAUDRON, D. TOBAR (MINES)
10h45 12h15	<b>CONTEXT OF URBAN LOGISTICS</b>  S. TAMAYO (MINES)	<b>SIMULATION IN URBAN LOGISTICS</b>  D. TOBAR (MINES)	<b>PARCELS: A GROWING TREND</b>  E. BONNAUD	<b>INTRODUCTION TO E-COMMERCE</b>  D. TOBAR (MINES)	<b>FIELD EXERCISE PRESENTATION</b>  WINE & CHEESE
14h00 15h30	<b>AUTONOMOUS VEHICLE AND SMART MOBILITY</b>  C. LAURGEAU (INTEMPORA - MINES)	<b>OPERATIONS RESEARCH IN UL</b>  S. TAMAYO (MINES)	<b>FIELD EXERCISE</b>  (TEAMS OF STUDENTS)	<b>WHOLESALEING &amp; DISTRIBUTING IN CITIES</b>  A. SCHNAPPER (POMONA GROUP)	FREE
15h45 17h15	<b>AUTONOMOUS VEHICLE AND SMART MOBILITY</b>  C. LAURGEAU (INTEMPORA - MINES)	<b>OP. RESEARCH CASE STUDY</b>  S. TAMAYO (MINES)	<b>FIELD EXERCISE</b>  (TEAMS OF STUDENTS)	<b>WHOLESALEING &amp; DISTRIBUTING IN CITIES</b>  A. SCHNAPPER (POMONA GROUP)	FREE

## PEDAGOGICAL OBJECTIVES

This course aims at providing an introduction to the main notions, stakes, difficulties and opportunities related to urban logistics. In this field, problems tend to be complex with many actors (residents, professionals and authorities) that often have contradictory objectives.

As this course is intended for undergraduate engineering students, an important part of it focuses on modelling and simulation tools, available to describe and predict the various ways in which urban logistics systems might react to changes (in policies, regulations, behaviours of actors, etc.).

The course is based on three specific objectives as follows:

- Understand why urban logistics cannot follow the same logic of management as “classical logistics”, especially in terms of massification choices, delays and inventory management.
- Analyse recent developments in the context of urban logistics in France and abroad (e.g. increase in the costs of land, multiplication of relay points, outburst of e-commerce, etc.).
- Introduce modelling and simulation tools available to engineers in order to propose thorough analysis and innovative solutions to problems in the field of urban logistics.