



## Teaching Guide

| Teaching Guide           |                                                                                     |        |          |           |
|--------------------------|-------------------------------------------------------------------------------------|--------|----------|-----------|
| Identifying Data         |                                                                                     |        |          | 2019/20   |
| Subject (*)              | Movilidade Sostible e Sistemas de Transporte Metropolitano de Capacidade Intermedia |        | Code     | 632508017 |
| Study programme          | Mestrado Universitario en Investigación en Enxeñaría Civil (2013)                   |        |          |           |
| Descriptors              |                                                                                     |        |          |           |
| Cycle                    | Period                                                                              | Year   | Type     | Credits   |
| Official Master's Degree | Yearly                                                                              | First  | Optional | 6         |
| Language                 | Spanish                                                                             |        |          |           |
| Teaching method          | Face-to-face                                                                        |        |          |           |
| Prerequisites            |                                                                                     |        |          |           |
| Department               | Matemáticas                                                                         |        |          |           |
| Coordinador              |                                                                                     | E-mail |          |           |
| Lecturers                |                                                                                     | E-mail |          |           |
| Web                      |                                                                                     |        |          |           |
| General description      |                                                                                     |        |          |           |

## Study programme competences

|      |                             |
|------|-----------------------------|
| Code | Study programme competences |
|------|-----------------------------|

## Learning outcomes

|                   |                             |
|-------------------|-----------------------------|
| Learning outcomes | Study programme competences |
|-------------------|-----------------------------|

## Contents

| Topic | Sub-topic |
|-------|-----------|
|       |           |
|       |           |
|       |           |

## Planning

| Methodologies / tests          | Competencies | Ordinary class hours | Student's personal work hours | Total hours |
|--------------------------------|--------------|----------------------|-------------------------------|-------------|
| Introductory activities        |              | 1                    | 0                             | 1           |
| Guest lecture / keynote speech |              | 40                   | 40                            | 80          |
| Case study                     |              | 20                   | 40                            | 60          |
| Document analysis              |              | 1                    | 8                             | 9           |
| Personalized attention         |              | 0                    |                               | 0           |

(\*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

| Methodologies                  | Description |
|--------------------------------|-------------|
| Introductory activities        |             |
| Guest lecture / keynote speech |             |
| Case study                     |             |
| Document analysis              |             |

## Personalized attention



| Methodologies | Description |
|---------------|-------------|
|               |             |

| Assessment                     |              |             |               |
|--------------------------------|--------------|-------------|---------------|
| Methodologies                  | Competencies | Description | Qualification |
| Guest lecture / keynote speech |              |             | 0             |
| Case study                     |              |             | 0             |
| Document analysis              |              |             | 0             |

| Assessment comments |
|---------------------|
|                     |

| Sources of information |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic                  | <ul style="list-style-type: none"><li>- Comisión de las Comunidades Europeas (2007). Libro verde. Hacia una nueva cultura de la movilidad urbana.</li><li>- UITP (2001). Desplazarse mejor en la ciudad.</li><li>- IHOBE (2004). Guía práctica para la elaboración de Planes de Movilidad Urbana Sostenible.</li><li>- IDAE (2006). Guía práctica para la elaboración e implantación de Planes de Movilidad Urbana Sostenible (PMUS).</li><li>- Sanz Alduán, Alfonso (2008). Calmar el tráfico: una herramienta de la movilidad sostenible. Ministerio de Fomento</li><li>- R. Bugarín, M., Novalés, M., Orro, A (2003). Evolución de los sistemas tranviarios. Tórculo</li><li>- Vuchic, V.R. (2007). Urban Transit. Systems and technology. John Wiley &amp; Sons, Inc</li><li>- Grava, S. (2003). Urban Transportation Systems. Choices for communities. McGraw-Hill</li><li>- APTA (2013). Modern Streetcar Vehicle Guidelines.</li><li>- VDV (2007). Local and regional railway tracks in Germany.</li><li>- Transportation Research Board (2012). Track Design Handbook for Light Rail Transit.</li><li>- UITP (2004). Guidelines for selecting and planning a new light rail system. Level 1, 2 &amp; 3.</li><li>- CERTU (2005). Bus à Haut Niveau de Service. Concept et recommandations.</li></ul> |
| Complementary          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| Recommendations                                          |
|----------------------------------------------------------|
| Subjects that it is recommended to have taken before     |
|                                                          |
| Subjects that are recommended to be taken simultaneously |
|                                                          |
| Subjects that continue the syllabus                      |
|                                                          |
| Other comments                                           |
|                                                          |

(\*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.