

CIVIL-324

**Urban public transport systems**

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<b>Cursus</b>	<b>Sem.</b>	<b>Type</b>
Civil Engineering	BA6	Obl.

Language of teaching	English
Credits	3
Session	Summer
Semester	Spring
Exam	During the semester
Workload	90h
Weeks	14
<b>Hours</b>	<b>3 weekly</b>
Lecture	2 weekly
Exercises	1 weekly
<b>Number of positions</b>	

**Summary**

An introduction to urban public transport system planning, operations and management.

**Content**

The course consists of three modules: fixed-route transit and railway, mobility-on-demand service, and multi-modal travel system. The modules will cover the main characteristics and key design problem of each type of service

**Keywords**

fixed route transit planning; railway operations; mobility service system design

**Learning Prerequisites****Required courses**

CIVIL-355 Introduction to transportation systems (Ba4)

**Learning Outcomes**

By the end of the course, the student must be able to:

- Define and describe major forms of urban public transport
- Elaborate key concepts and fundamentals in the planning, operation and management of public transport systems
- Carry out design of stylised public transport systems

**Transversal skills**

- Use a work methodology appropriate to the task.
- Take account of the social and human dimensions of the engineering profession.
- Demonstrate a capacity for creativity.
- Evaluate one's own performance in the team, receive and respond appropriately to feedback.

**Teaching methods**

Ex-cathedra with assisted exercises, course group projects

**Expected student activities**

Attending lectures, doing assignments and project, preparing for exams

### **Assessment methods**

- Assignments: 20%
- Project: 30%
- Final exam: 50%

### **Resources**

#### **Ressources en bibliothèque**

- [UrbanTransit / Vuchic](#)
- [Public Transportation Systems / Daganzo](#)