

Urban Systems, Real Estate, and Construction Management 1

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Offered by	Department of the Built Environment, unit Urban Systems and Real Estate
Language	English
Primarily interesting for	All students, but most relevant for students with interest in the USRE track in the Architecture, Building and Planning (ABP) program and the Construction Management and Engineering (CME) program.
Prerequisites	Required courses: none Recommended courses: none
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Content and composition

Urban environments are used and exploited over a long period of time. In the meantime, buildings will be transformed, spaces redesigned, urban areas redeveloped, and infrastructure adapted to new developments. The initially assumed use of real estate and urban areas is often of short duration. The actual use, new insights, and new developments give reason to adapt the existing situation to the new circumstances, both at the level of individual buildings and at the level of urban areas. In addition, new developments and new ways of financing and management increase the complexity of decision-making regarding the built environment.

The spatial context is important when developing and adapting buildings and urban areas. The options decision-makers face are complex because of the existing real estate and infrastructure and dynamic behavior of the users. To support decision-making, increasingly more complex theories and more information concerning the use of urban facilities, mobility, and valuation are required.

This set of coherent courses addresses the mentioned aspects. The student will be introduced to the field of development and management of the built environment from the standpoint of users and other stakeholders. The courses prepare the student for the track of Urban Systems & Real Estate and the master's program Construction Management and Engineering.

Course code	Course name	Level classification	Last year course is offered	Last year exam is offered
7W9X0	Transportation Engineering	1	n.a.	n.a
7W7X0	Urban Planning	2	n.a	n.a
7U7X0	Urban Projects and Finance	3	n.a	n.a

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Course description

7W9X0 Transportation Engineering

This course is about traffic infrastructure for pedestrians, bicyclists, public transport, and cars. You will get insight into the required dimensions, materials, and acceptable densities concerning the infrastructure for these transportation modes. Also, concepts like sustainable safety and shared spaces will be discussed, as well as the requirements regarding health, comfort, and accessibility. The course will mainly deal with infrastructure in urban environments.

7W7X0 Urban Planning

The various aspects of the urban environment, transportation, facilities, economy, recreation and tourism, quality of life, and health are presented and discussed from both a scientific and societal point of view. Most important research and theories in the area of urban and environmental development are addressed. The development of urban plans and their juridical status is discussed as well as the various parties involved in urban planning and development. Urban planning policy in the Netherlands at the different governmental levels and in relation to the Europe Union is discussed. Various urban plans at different spatial levels will be presented and discussed in terms of the theories and studies dealt with in this course.

7U7X0 Urban Projects and Finance

This course provides an introduction to the financial and strategic aspects of area development and real estate development. Relevant aspects such as land exploitation calculations, value capturing, development strategy, risk management, and sustainability will be dealt with, as well as financial consequences of sustainability measures in real estate developments. During the lectures, trends and practical examples will be discussed. Throughout the course groups of students will work on a case of an actual area development in which they gradually apply the aspects of the lectures.