EXPLORING FUTURE CITIES

Minor code	VTL4OPVNB1
Education cycle	1st cycle (bachelor)
Mode of delivery	On campus
Study programme	Garden and Landscape Design
Part of study year	Year 4
Location	Velp
Semester	Fall semester; terms 1 and 2
Number of credits (ECTS)	30
Language of instruction	English. Lectures will be in English as much as possible. Individual tutoring and guidance will be done in English for foreign students, but will also be done in Dutch when only Dutch are present (f.i. in small groups).
Target group	VHL-students, external students, Erasmus exchange students. Background of Bachelor and Master studies in the field of Landscape Architecture, Landscape Design, Urban Planning and Architecture.
Minor co-ordinator and contact person	Adrian Noortman, adrian.noortman@hvhl.nl
Entry requirements and prerequisites	Two years of bachelor course in Landscape Architecture, Architecture or Urbanism (or comparable).
Application procedure	Standard application for Erasmus students. Signed Learning Agreement, transcript of records (subjects, grades and EC's), CV. Additionally a Portfolio with own work, and a letter of motivation, may be required. If needed an online interview can be part of the admission procedure. Consult Exchange possibilities

Major study units	Term of teaching	Study unit code	Name of the study unit	ECTS
	Term 1 and 2	VTL4OPVNB1	Exploring Future Cities	30

Content	The minor 'Exploring Future Cities' focuses on exploring the city of the future. Cities worldwide face major challenges to remain safe, attractive and livable in the future. How can the city adapt to climate change? How are the city and the rural area connected in the future? How can the city provide space for an increasingly diverse population? How can the city turn from a 'carbon source' into a 'carbon sink'?

The major challenges in the areas of climate, biodiversity, water and food supply, mobility, energy, security, etc., require a reconsideration of the use and design of urban space and the exploration of new possibilities. The minor 'Exploring Future Cities' offers students the opportunity to explore various aspects of the city of the future, by searching for integrated and spatial solutions and designing new systems and building blocks for the city. Students are challenged to ask questions about the design and principles of existing cities, to think outside the box and to look for innovative and perhaps unorthodox solutions.

Application of Digital techniques
When exploring the city of the future, three-dimensional searching and imagining is essential, as is thinking in terms of change processes and the time factor. To this end, various 3D software packages are applied during the minor and digital techniques such as VR, eye tracking, 3D printing can be used and mock-ups or models can be created using the laser cutter. AI software

	can also be used in the search for the city of the future. During the minor there is sufficient time to delve into and apply various software packages.
Competences	Professional competencies: • Spatial Strategy • Design Generic competencies: • Research abilities • Self-regulation and personal development • Visual communication • Creativity • 3D-software application
Learning goals	The student: • Is aware of the major challenges and social tasks that cities face and develops a self-confident and critical attitude towards these tasks; • Learns to 'read' the structure and functioning of cities, to analyze and understand them in a targeted manner; • Teaches methods for spatial analysis, design and visualization, especially from a 3-dimensional approach to space; • Broadens his/her view beyond his/her own field and learns to think outside the box. • Explores the possibilities of existing and new software (and hardware) for analysis, design and (re-)presentation (Lumion, Blender, Rhino, SketchUp, GIS, etc.) and learns to apply them; • Learns how design can be applied to a form of research. • Learns to report (on the ongoing design search) in the form of a website.
Added value	During the minor you will become (increasingly) aware of the major changes currently taking place in cities and the challenges facing the city. Based on this awareness, we explore what contribution you could make from your professional discipline to solving numerous issues surrounding the design and organization of cities. The minor also offers the opportunity to develop deeper into the use of graphic software and other digital techniques aimed at 3D analysis, design, visualization and communication and to increase your knowledge and skills regarding the application of 3D software. The research and laboratory nature of the minor offers room for experimentation and exploring new avenues.
Mandatory literature	n/a
Teaching methods and student workload	The minor has a 'hands-on' and experimental research character. In small groups we work on a self-formulated assignment or one of the assigned assignments. The basic principle for the minor is that you really spend 40 hours per week on this and are available for educational activities from Monday to Friday from 9:00 AM to 5:00 PM. In principle, work is done at school every day (with the exception of excursions and field inventory days). There is weekly substantive guidance from the permanent teachers. The minor is not a 3D-software course! Students are expected to explore and apply the available 3D- and other software independently and together. The guidance is aimed at supporting this search. Activities and working methods include: literature study, workshop/expert meetings, field analysis excursions, interviews, lectures/lectures (Thursday evenings) and computer work.
Assessment	The assessment consists of the following components that are assessed together in one integrated final assessment: • Research design and implementation; • Personal learning experience and functioning in the group; • Research result; • Visual reporting results • Final presentation (per project group).

Visual reporting of the process and the research results is an important part of the work. Reporting of the process is done in the form of a website.

In an individual oral assessment, the knowledge acquired and one's own role and contribution to the group product are tested. Peer assessments serve as an aid in assessing the group process and the individual role and contribution of the student.

Evaluation scale	1 Grades between: 1-10; 0,1 interval; 5,5 pass
	View ECTS credits and grading