

Funded by the Erasmus+ Programme of the European Union

**Project title**: Descending Cities

**Number of students: 4 to 6**

**Project duration**: 20 weeks

**Project frame** (Bachelor/Master, small project): Bachelor, Master, 20 weeks project

**Background:**

Dutch soil is descending! In some areas up to 2 meters in 2050. This is not only caused by earthquakes in Groningen, but also because of the extraction of salt in Twente, disappearing turf in Rotterdam and setting clay in Almere. This results in cracking houses and foundations, swampy meadow-lands where cows can hardly graze anymore and descending roads, sewers and pipes. Problems that will cost us over 20 milliard Euros till 2050. Everybody will be confronted with the consequences of this descending and there is no simple solution. Municipalities, waterboards, companies, house owners and pipelinemanagers have to cooperate to fight the problems. By repairing the old, and planning the new: adjusted foundations, changes in water management, flexible constructions and smart city planning. But: successful anticipation requires awareness amongst all stakeholders about the problem and the necessity to cooperate. Awareness that is hardly there at this moment.

**The challenge:**

Antea Group ([www.anteagroup.nl](http://www.anteagroup.nl)) and the Chair Urban Underground are looking for a “learning by playing” VR experience or game about descending cities. An experience that will help municipalities, waterboards, companies, house owners and pipe administrators to understand the problem of soil descending in relation to city development and contributes to the development of possible solutions. The goal of this project is to create awareness and to stimulate learning about the issue. By taking part in this project you will cooperate with a company and researchers on a product with social relevance.

You will deliver one or more concepts for the experience of which one concept will be worked out in a working prototype. It’s a challenging project for students that are interested to learn more about storytelling, serious gaming, education, ux/ui design and interactive experiences.

**The company:**

Antea Group (<https://www.anteagroup.nl/en)i> is a consultancy and engineering firm with a focus on data-driven design in urban and infrastructure areas.

Research group Soil & Underground Soil & Subsoil of Saxion researches underground issues in the context of social, spatial and administrative issues.

**Supervisor:**

Hester van der Ent [h.vanderent@saxion.nl](mailto:h.vanderent@saxion.nl)

Teacher at the course Creative Media and Game Technologies. Teaching topics: design thinking, concept development, communication, marketing and consumer behaviour.

Background: advertising, business administration.

International experience: collaboration with the United Nations, World Health Organisation and NCD Free. Teaching in China, Finland and Germany.

Possible study programmes:

**Candidate backgrounds**

Possible study programmes:

Architecture and Construction Engineering

Construction Management

Creative Media and Game Technologies

ICT

Media, Information & Communication

Industrial Engineering & Management

Applied Physics

**References and complementary description:**

None