Smart City is a buzzword. Technological developments bring opportunities for the city, but also social discussion. How do citizens and administrators deal with the digitalisation? What questions arise with developments such as Wi-Fi trackers, cameras, and drones in public space? This raises not only technical, but also legal, economical, and sociological questions.

The Leiden-Delft-Erasmus minor Smart and SHARED Cities highlights the smart city theme from various disciplines. The program consists of a combination of data science, public administration, urban studies, and social sciences. You will learn about the opportunities offered by new technology and about the social issues that arise from it.

**FOR WHOM?**
Are you interested in the development of smart and SHARED cities and the digital society? Then, this minor might be right for you. The programme is offered in English and is accessible to all students from Leiden University, TU Delft, and Erasmus University Rotterdam.

**THE PROGRAMME**
Through case-based education, the minor teaches smart city concepts and the underlying complexity of modern cities. The minor is characterized by a multi-disciplinary approach, which allows you to take on different perspectives.

The minor is a full-time programme that starts in September. The 15 EC programme comprises modules 1 to 3 and lasts ten weeks. The 30 EC programme continues with modules 4 and 5 and lasts twenty weeks.

The modules use a combination of traditional and innovative learning methods, involving guest lectures, field trips, group work, and the integration of academia and practice.
THE MODULES

Module 1: Introduction to the smart city
In module 1, you will be introduced to the core ideas of smart cities and technologies. The module will cover various smart city concepts and the basic digital and data technologies that constitute smart cities. You will discuss legal, ethical, political, and social dilemmas.

Module 2: Citizens and everyday experiences with the smart city
During module 2 you will learn about the place and role of citizens and citizen participation in smart city rhetoric, practice, and design. The topics will be addressed from a critical perspective.

Module 3: Governing the smart city
In module 3 you will focus on how (smart) cities are governed. This includes three themes: foundations of policymaking and governing the (smart) city, responsible and good governance of digital and urban spaces, and digitizing and datafying the city for, with, and by citizens.

Module 4: Urban data science
You will be introduced to quantitative and computational approaches to cities and planning, and to state-of-the-art computational methods and tools. Module 4 will discuss various opportunities, as well as risks and limitations of using novel urban data for solving complex challenges in cities.

Module 5: Research participation and projects
As part of module 5, you will put the knowledge of previous modules into practice. For ten weeks, you will work for an external commissioner on a complex problem related to the underlying complexity of modern cities, focused on urban technologies, data science, and/or multi-stakeholder governance.

LEIDEN-DELFT-ERASMUS
The minor combines various disciplines from three top universities. Professors and students from Leiden University, TU Delft, and Erasmus University Rotterdam work together to provide a broader perspective on smart cities.