

Urban Environment, Sustainability & Climate Change Master track

MSc Urban Management and Development

Urban Environment, Sustainability and Climate Change

Nature-Based Solutions for Smart and Resilient Cities

Nature-based solutions, climate change adaptation and mitigation, and ICT-based solutions are essential in tackling the growing threat of climate and environmental instability. This learning track focuses on different conceptual, analytical and practical approaches to foster sustainable, smart and climate-resilient cities world-wide.

What will I learn?

This track offers students the opportunity to understand recent trends and developments related to urban environment, sustainability and climate change. Students will learn to apply the most innovative analytical tools used to promote sustainable, smart and resilient cities. Throughout the track, participants look at the impact that nature-based solutions, climate mitigation and adaptation, energy transition and ICT-based solutions have on building sustainable, smart, and climate-resilient cities. These perspectives are complemented by a focus on governance arrangements and the management of transition and change processes.

Besides developing management and governance expertise, the specialisation allows you to also make use of your technical skills like geographical information systems (GIS), large data sets analysis and performing computer-based simulations.

Course modules

Urban environment, sustainability and climate change

Climate change mitigation & adaptation in urban areas

Urban ecosystem services and nature-based solutions

ICT-based solutions, energy transitions and smart cities

Methodological approaches & data analysis

"This programme has provided me the opportunity to work within diverse multi-cultural teams, and to explore and develop innovative strategies for urban development, while interacting with local stakeholders of Rotterdam."

Max Russell
United Kingdom



Why should I choose this programme?

- Learn from active policy advisors and practitioners
- Train to use different tools to prioritise urban environment and climate change decisions (ClimactPrio)
- Understand and analyse the effects, impacts and drivers of climate change and vulnerability in cities
- Design scenarios in Tygron Geodesic Platform
- Learn software (GIS and R) to analyse geospatial and quantitative data, skills demanded by the labour market
- Applied learning through field visits and serious gaming
- Study in Rotterdam - a hub of sustainable urban innovation
- Benefit from dynamic and broad career opportunities

Learn more at ihs.nl/environment

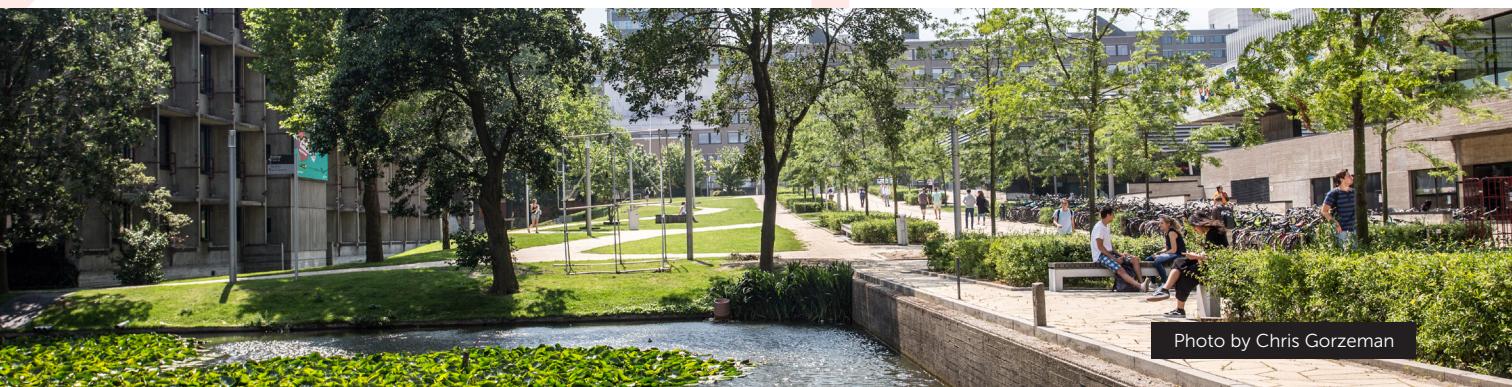


Photo by Chris Gorzeman