Course information system	Year of study 2024-2025
Study Programme	Applied Geo-information
Course unit code	AG2403
Course unit title	Smart Cities
Location	's-Hertogenbosch
Coordinator	Erik Dietvorst
Type of course unit	$\boxtimes$ Mandatory $\square$ Not mandatory
Language of instruction	English
Credits (ECTS)	30
Moment of delivery	Year 2 Semester 2
Prerequisites Application deadline Content	<ul> <li>Basic knowledge about the use of geographical information systems (GIS) is necessary. If required, teaching materials are available to update your knowledge</li> <li>Enrolling students are able to demonstrate a high ability to work independently: they are able to make decisions and put together their own curriculum.</li> <li>The relevance of the applicant's background will be assessed during an intake interview with the coordinator of the course, based on a letter of motivation and CV.</li> <li>English skills at level B2. (more information can be found via the Common European Framework of Reference for Languages).</li> <li>1 November 2024</li> <li>How can technology make a smart contribution to the (future) challenges of particular cities, both nationally and internationally? In this programme we look at major developments in cities and challenges we face in keeping the city liveable and attractive. The aim is to provide insight in the major challenges faced by selected cities using geo-information and data.</li> <li>As part of the programme, you will work on a number of individual assignments, and an interdisciplinary project with fellow students. In the project, you and your colleagues will work on a real-life urban challenge in a selected city.</li> <li>Topics covered are:     <ul> <li>World urbanization</li> </ul> </li> </ul>
	<ul> <li>3D geo information/Digital Twins</li> <li>Citizen participation</li> <li>Virtual Reality</li> <li>Creating Dashboards</li> <li>Sensor technology</li> </ul>
	<ul> <li>In addition, Smart Cities has one or more field trips abroad to view and experience the topics in the real world.</li> <li>During the programme, you are also free to select a combination of different elective courses. Examples are:         <ul> <li>Remote Sensing (satellite image interpretation)</li> <li>Spatial Decision Modelling</li> <li>LIDAR (point clouds)</li> <li>Serious Gaming</li> </ul> </li> </ul>
Learning outcomes	During the exchange programme <i>Applied Geo-information: Smart Cities</i> students will learn how to use various analytical tools and methods to



	gain insights in urban challenges, and how to translate their findings							
	into tangible information products for the end-user.							
Mode of delivery	Face-to-fa	ce						
Schedule	The programme lasts 20 weeks (excluding holidays) with a study load of							
	40 hours per week. You are expected to be present at least 16 hours a							
	week for the learning community (lectures and practicals). You plan the							
	remaining 24 hours independently with your fellow students for your							
	project, your individual assignment or to work on your elective courses.							
Learning activities and	Method Study load (hours)							
teaching methods	lectures 11							
	practicals			39				
	instructio	nal lecture	es				7	
	project						20	
	Field trip						40	
	Total						117	
Test matrix								
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