

Course Title	Data science for business IT		
Term	Fall semester – term 1 and 2		
Inholland Faculty	Engineering, Design and Informatics (Techniek, Ontwerp en Informatica)		
Language of instruction	English		
Cycle	Bachelor level		
Inholland Location	Term 1: Alkmaar Term 2: Alkmaar/Diemen (every other week - transport costs will be covered)		
Code Subjects	Code	Subject Title	ECTS
	1921DATAIZ	Data Integration	15
	1921DATASZ	Data Science	15
Number of ECTS	30		
Content subjects	<p>Data integration</p> <p>You will collect data from heterogeneous sources. You will design and implement an architecture for storing this data. Making the data available to a data scientist.</p> <p>Data science</p> <p>You will translate the customer's question into a question for the data scientists (Mathematical Engineering students). When they have done their work, you will translate their answers into an answer that your customer can understand.</p>		
Lecturer(s)	<p>Lecturer/ Coordinator: , Erik Ellinger</p> <p>Business IT and Management Lecturers: Bob Montijn, Andries Kooijman</p> <p>Mathematical Engineering lecturers: Frank Brandse, Vera Hollink</p>		
Learning outcomes	<p>Data Integration</p> <p>The student identifies and opens heterogeneous sources to be able to load them into a database. An architecture must be designed for this. The student cleans up the data and assesses and checks the quality of the sources. The student does this in preparation for the transformation of the sources to make the data suitable for analysis in the follow-up project.</p> <p>Data Science</p> <p>The student can generate business insights from data together with a data scientist and present them to the business. The student does this by collecting and interpreting data from different heterogeneous sources from the first project. The student tries to find answers to the client's question. The student collects the requirements and discusses with the ME students which analysis</p>		

	<p>must be performed to answer the question. The analysis is performed by a ME student. The student then checks whether the prediction comes true and provides steering information for further decision-making. Based on this, the student formulates a recommendation for the business.</p>
Mode of delivery, planned activities and teaching methods	<p>During the minor, you work on two projects for an external client.</p> <p>The first phase focuses on the “Data Integration” project. During this project, you, and a group of 3 students will unlock sources and load them into a database. You will then clean up the data and assess and check the quality of the sources. You can see these steps as preparation for project 2 “Data Science” in which you will analyze the data.</p> <p>This second project is being carried out together with students from the Mathematical Engineering (ME) study program in Diemen.</p> <p>Project meetings are held every week in which the students work on the project, workshops are held, or guest lectures are given.</p> <p>Testing and assessment takes place based on the two completed projects of “Data Integration” and “Data Science.”</p>
Prerequisites and co-requisites (if applicable)	<p>Knowledge of databases</p>
Recommended or required reading and/or other learning resources/tools	
Assessment methods and criteria	<p>For both projects, the students must deliver a product and a final report to be presented in a final presentation. The result is judged by the lecturers and the clients. Lecturers and clients must both approve the result.</p>