inholland
university of
applied sciences

Data & AI

Course guide 2026-2027

Semester	Spring (semester 2)
Inholland location	Haarlem
Inholland faculty	Engineering, Design and Computing
Language of instruction	English
Cycle	Bachelor level
Number of ECTS	30

Subjects

Subject title	ECTS	Course code
Project Data & AI: Design	5	1924PRDAIZ
Data & AI Fundamentals	2	1924DAAIFZ
Computer Vision 1	3	1924CVIS1Z
Data Mining & Statistics	3	1922DMSTAZ
Research Data & AI	2	1924RESDAZ
Project Data & AI: PoC	6	1924PDAPOZ
Model Deployment	2	1924MODEPZ
Computer Vision 2	3	1924CVIS2Z
Natural Language Processing	2	1922NLNGPZ
Guest Lectures	1	1924GUELEZ
Interactive Presenting	1	1924INTPRZ

Content subjects

The need for data scientists and AI-experts has grown exponentially over the past few years. While there are many AI or Data Science minors out there, this minor uniquely focuses on the interaction between the field of Data Science and Artificial Intelligence and uses a software-oriented approach to solving 'wicked (data) problems'.

The core of the minor consists of a group project for an external client, which provides you with the opportunity to work on real-life realistic problems. The end results is a proof-of-concept application that enables the external client to use the student-developed AI-model in the future.

Learning outcomes

The student is able to:

- Work on a data science driven research project
- Create and train a machine learning model/pattern
- Create an application to show the outcomes of the machine learning / deep learning models/patterns
- Cooperate with fellow students in software development activities
- Effectively communicate with external clients

Mode of delivery, planned activities and teaching methods

The core of the minor consists of a group project for an external client, which provides you the opportunity to work on real-life realistic problems.

- Workshops by experts
- Do research with your project group
- Lectures on theory combined with practical exercises

Prerequisites and co-requisites

Bachelor ICT 3rd year with experience in programming.

Assessment methods and criteria

- Project assessment for Project Data & AI, consisting of a written report, a code review and a presentation of the created application
- Individual homework assignments for Data Mining and Statistics
- Final group presentation for Data & AI Fundamentals
- Individual homework assignments for Model Deployment
- Individual final exam assignments for Computer Vision 1
- Final group paper for Research Data & AI
- Individual final assignment for Natural Language Processing
- Individual final assignment for Computer Vision 2
- Individual final assignment for Guest Lectures
- Final group presentation for Interactive Presenting

All assessments must be completed with a sufficient grade (55 or higher).

Lecturer(s)

Teachers of the Information Technology study program (Haarlem) and guest lecturers from the research group (lectorate) Data Driven Smart Society provide lectures. Workshops and training sessions are provided by specialists from the field of Data Science and Artificial Intelligence.

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