



# Data Science for Business Managers

Certificate program in data science for professionals

7-month (Level 1) or 12-month (Level 2) program

# Data Science for Business Managers

Big Data and analytics are changing the world rapidly. This unique course prepares you for a leading role in this new reality. The JADS Data Science for Business Managers is a certificate program for professionals based on the dual perspectives of the universities of Eindhoven and Tilburg. The program can be completed at Level 1 (7 months) or Level 2 (1 year) and is targeted at professionals who are eager to learn how to integrate data and analytics into their work and explore the value of data in their business.

## Bridge between analytics and business

This program educates you to become an Analytics Translator. Where data engineers and data scientists are technical experts, Analytics Translators are the bridge with other business functions. This role is crucial to ensure that data science connects flawlessly to the business needs.



Chapel in the Marienburg

## Become an all-round data science manager

Upon completion of the program, you know the value that Big Data and analytics could bring to the organization, and you master the skills to translate business goals to data-science questions. You are able to define a good data-science project and organize a data-science team. You

understand the managerial challenges of shaping the analytics ambitions of the organization. You recognize and master the opportunities and practical applications of data science in your own sector (professional services, industry, health, supply-chain, energy or public sector).

The program follows three modules: Foundation (6 weeks), Level 1 (5 additional months) and Level 2 (5 additional months).

## Foundation (6 weeks, 1 day per week)

- Orientation in data science, Big Data, new analytics and new business opportunities.
- Predictive analytics, supervised and unsupervised learning, and their practical applications in a Python-based analytics environment.
- Practical challenge: apply machine learning and the data-analytic workflow as embodied by the CRISP-DM model.

## Level 1 (5 additional months, 1 day per week)

- Core program in data analytics, data engineering and data entrepreneurship; training as an all-round analytics translator.
- Sector specialization: predictive maintenance, computational personalized healthcare, natural language processing and other applications specific to your sector.
- Team challenge: develop a realistic data-science solution in a complex and challenging group project.
- Upon completion of this level, you become a Certified Analytics Translator.



## Level 2

(5 additional months, 1 day per week)

- Deep-dives in advanced-level topics, including privacy law & data security, process mining and advanced data architectures.
- Two-day bootcamp including a hackathon with your classmates.
- Leading a data-science initiative and achieving real impact.
- Individual project: With the support of JADS experts and professors you develop a data-driven business opportunity or you design a new business strategy, involving a deployment or transition plan.
- Upon completion of this level, you become a Certified Lead Analytics Translator.



## Teaching methods

Real challenges make learning motivating, help get your organization involved, and are a catalyst to achieving real impact. During the program, you complete three CRISP-DM data-science projects: a stylized team assignment in the Foundation program, a complex and realistic group assignment in the Level 1 program, and finally a substantial project in your own organization, supervised and supported by JADS experts, and delivering real impact and creating value for your organization.

## Become part of our community

The Mariënburg, a former convent in the historical center of Den Bosch is JADS' home. It's a welcoming, inspirational and atmospheric environment for life-long learning and becoming part of our community, with the former chapel functioning as the main auditorium, and the vast complex offering many surprising authentic details reminiscent of its former function (and housing a large number of data-driven startup companies).

## Data scientists are T-shaped professionals

The T-shape visualizes the idea that a successful career is based on the combination of deep technical expertise (the vertical bar) and wide and broad boundary-crossing skills (the horizontal bar).

We develop T-shaped Data Scientist who are both tech savvy and business savvy. Who do understand the technical skills of data engineering and know how to use data-warehouses, build a data pipeline and access Big Data cloud solutions. But who also understand how business models and strategies work, are able to manage data-science projects delivering results, and in general, know what it takes to get things done in large and complex organizations.



## Our professors

The program is taught by a combination of senior experts working in business and society, and professors from Eindhoven University of Technology and Tilburg University. In the assignments, you are supported by a Community Academic Director who combines an academic affiliation with practical expertise in your sector like professional services, industry, health, supply-chain or in the public sector.



Prof. dr. Jeroen de Mast

The program's teaching team is headed by Professor Jeroen de Mast. Jeroen is professor of statistics and data science at the University of Waterloo (Canada), Scientific Director at Holland Innovative, and Academic Director of Professional Education at JADS.

## Information session

Join one of our information sessions. Discuss the program and your ambitions with JADS' professors and get to know your peer cohort. Register at our website.

## Contact us

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## Foundation for CAP certificate

"I wanted to complement the successful completion of the Data Science for Professionals program at JADS with an internationally recognized Certified Analytys Professional (CAP) certificate from INFORMS. I succeeded. The JADS program for Professionals turned out to be an excellent foundation for obtaining this globally renowned certificate"

Chris van Niekerk, Lead Data scientist Digital Advertising, DPG Media



# Program in brief



May & November



Den Bosch / Online



Certificates:

Certified Analytics  
Translator (Level 1)  
Certified Lead Analytics  
Translator (Level 2)



€ 9,950 (Level 1)  
€ 18,950 (Level 2)



8 hrs/week (class)  
+ 8 hrs/week  
(assignments)



7 months (Level 1)  
1 Year (Level 2)

