



# Analytics Translator

Governments recognise big data and AI as a system change, transforming what organisations do and how they do it. Big data and AI will also change the roles of professionals. Where *data engineers* and *data scientists* are technical experts, *analytics translators* are business professionals in a variety of business functions: logistics managers, accountants, physicians, product developers et cetera. In the data-driven and digital business, they play the pivotal role of recognising opportunities where data and analytics could create value, and translating them into a data-analytic assignment for an analytics team. Analytics translators are the bridge between analytics and other business functions. This 6-day programme prepares you for playing this key role in your organisation. Or take the 2-day first module only for getting a good orientation into this rapidly developing field.

## After finishing the programme, you...

- Will be literate in new technologies in data engineering and analytics. You will understand what these technologies are, how they transform what organisations do and how they do it, and why they have so much impact.
- Will be able to translate a business opportunity into a data-analytic question, and to structure the work into a data-science project following the CRISP-DM model.
- Will be able to recognise validity issues in predictive algorithms and models.
- Will have a good overview of applications of data and analytics in business, government and healthcare.
- Will be well-prepared for playing a leading role in helping your organisation transform into a data-driven business.

## For whom?

Senior business professionals and managers who grow into a pivotal role in deploying data-driven working and digitisation in their work and organisations. The programme is suitable for professionals in diverse functions, such as finance, accounting, marketing, HR, sales, logistics, supply chain, product development, healthcare and service delivery. No specific prior knowledge of IT or analytics is required for this course.

## What will you do?

### Module 1: Understanding AI, data science and Big Data

(2-day module)

- Orientation module, aiming to give you a realistic overview of data science and emerging technologies and their potential value for your organisation.
- *New forms of data, new analytics, new business opportunities* Big Data, machine learning, AI: what are they, what can you do with them, and why do they have so much impact?
- *Doing data science* Managing data-science projects as CRISP-DM projects, where a business opportunity is translated into a data-mining question, where data sources are identified and pre-processed, where a model is developed and evaluated, and then deployed.
- *How machines learn, and machine learning in business* Machine learning is the quintessential technique in AI. We will explore many of the popular algorithms, such as decision trees, random forests and neural networks. Our focus is on understanding what it takes to deploy machine learning and AI in a sound, reliable and secure way to create value in a business environment.

- *Digital safari*

Explore the landscape of emerging digital technologies We review the foundational technologies that enable the digital transformation: cloud computing, Big Data, AI, cybersecurity and IoT. We also discuss far-future disruptive technologies, such as AI & robotics, energy, extended reality (AR/VR), quantum computing, 3D printing, and biotech. And finally, we learn about service & technology ecosystems and SaaS.

## Module 2: Preparing for the role of Analytics Translator

(4-day module, including a capstone assignment)

- *Data and analytics use cases*

We can learn a lot from other companies that have successfully integrated new technologies and analytics. We review a number of use cases from a variety of industries, including healthcare and government.

- *AI strategy and value chain, and determining the right business question*

How do you connect your business strategy to AI and how do you get maximum value out of data science projects, given your high-level company goals?

- *EU Privacy and AI laws*

A primer in EU legislation that needs to be considered when using data and algorithms.

- *Leading successful data science teams*

Data analytics teams are multi-disciplinary and cover many different skill sets. We offer structures that are helpful in getting flow in data analytics projects, and we also discuss what organisational infrastructure such projects need in order to be effective.

- *Data visualisation*

You learn the design principles and the applicability of various visualisation techniques.

- *Data governance and data management*

We explore the capabilities needed to ensure that high-quality data are available throughout the organisation in a secure and reliable way.

- *Capstone assignment*

Participants work on a practical assignment, which they develop and discuss with fellow participants and instructors. In the assignment, participants identify a business opportunity in their own organisation where data and analytics could be of value, and translate it into a data-analytic problem. Part of the assignment is to identify the required data sources and where they could be obtained, and participants will also design a suitable organisational structure for deploying such project in one's own organisation.

## Things you will like

- Combination of knowledgeable university professors and well-seasoned tech experts.
- State-of-the-art programme that prepares you for a leading role in the transformation towards data-driven business.
- No hypes, but practical skills as a solid basis for taking the next step in your career.

## Facts and figures

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|--------------------------|--|
| Schedule for Spring 2023 | 20 & 21 April, 11 & 12 May and 8 & 9 June                      |
| Times                    | 9:00 – 17:00   |
| Language                 | English  |
| Fee                      | €2,380 (Module 1 only, 2 days)<br>€5,750 (Modules 1+2, 6 days) |

## How to enrol?

You can enrol in this programme at [abs.uva.nl/analytics-translator](https://abs.uva.nl/analytics-translator)

## Fee

UvA alumni receive a 10% discount.

## Certification

After completing module 2 and the capstone assignment, you will be a Certified Analytics Translator.

## Contact

Do you want to know more, or do you want to discuss whether this programme is right for you? Please contact Jannice Daha, Manager of Executive Education, [executive-education@uva.nl](mailto:executive-education@uva.nl), +31 (0)20 525 6134.

## Teaching staff

Academic director: prof. Jeroen de Mast, professor of data-driven business innovation at the Amsterdam Business School of the University of Amsterdam. Prof. De Mast will teach this course together with professors and experts from the University of Amsterdam and ORTEC.

University of Amsterdam

Amsterdam Business School

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