





Learn Today, Apply Tomorrow, and Stay in the Driver's Seat

Are the advancements in cloud and ready-to-use technologies such as Stable Diffusion and GPT-3 making data engineering and data science skills obsolete? Far from it. Without knowing what is going on under the hood, extracting maximum performance is impossible. Understanding, controlling, and utilizing the full power of these tools makes having up-to-date data and AI skills more relevant than ever.

There was a time, not so long ago, when gathering enough data to train a deep learning model — and then figure out how to train it on a budget — was an essential skill of data professionals.

Then pre-trained models and communities around them — such as HuggingFace — made it not only easy, but quick and affordable.

This begs the question: Is being proficient in data science and engineering still relevant when you can outsource the job to someone else? The answer is yes — because everything is changing again.

With all the advantages of offloading our algorithms to "someone else", it's more important than ever to stay in the driver's seat. Here are three reasons why:

(1) The lack of transparency and apparent biases in algorithmic decision-making has fuelled public outcry on numerous occasions — the Netherlands made the world news with discrimination against dual nationality families and child benefits. You can only control the algorithm if you can tweak and modify it to address the ethical issues around it. Understanding what happens under the hood, even when using Al-as-a-Service, allows you to stay in Control.

(2) In 2023, we will continue to generate TBs of data per person every month. Storing it all would be far too expensive, but we can apply machine learning to the devices that generate it and only keep the insights. More and more systems at the edge, including mobile phones, have frameworks to help you out.

(3) Transfer learning takes a highly sophisticated algorithm and adapts it to your use case and data. As it requires less training samples and computational power, it is affordable to do it in-house.

These three trends make data science and engineering skills more relevant than ever.

So, it is my pleasure to present Xebia's all-new training curriculum. Developed and taught by the very best professionals in the field with pragmatism in mind — you can apply tomorrow what you learn today. Happy learning!

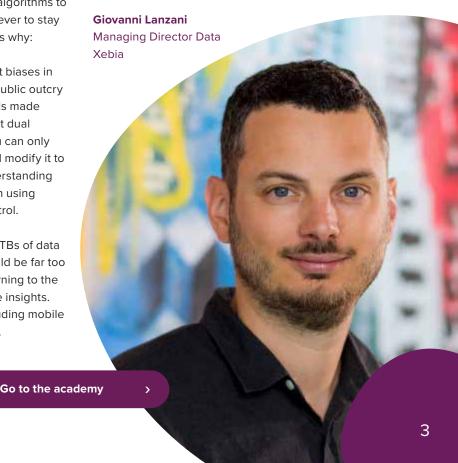


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Xebia Academy

Our Promise to You

At Xebia, we believe professional development goes hand-in-hand with staying happy, motivated, confident, and relevant in your job. You trust in us to help you improve your data and Al skills, and we take that very seriously.

So we strive to provide you with the best learning experience possible, by adhering to five promises:

(1) Learn Today and Apply Tomorrow

We design our programs so you can apply your newly acquired knowledge right out of the classroom. That way you can immediately increase your business value. We push the content of every training far beyond textbooks and theory. Applicability is one of our core values.

(2) Authority From the Field, Like No Other

We don't come from an abstract background; we are practitioners as much as we are teachers. All of our trainers work as consultants in the data and Al field, supporting top enterprises like Booking.com, ING, bol.com, Randstad, and Heineken. They solve challenges like yours every day, so you benefit directly from their experience.

(3) Learn by Doing, in Hands-On Labs

You learn best by doing. That's why, in every training, you can develop your skills and craft in our hands-on labs. We provide both the theory and context to get you up and running fast.

All of our courses have a 50/50 split between theory and hands-on labs.

(4) From Team to Boardroom

Built through years of working with the top enterprises in Europe, Xebia has the expertise to turn your data-driven ambition into reality. But becoming data-driven impacts your whole organization. That's why we deliver a wide range of programs suitable for all shapes and sizes—from individual teams to global workforces, as well as the boardroom.

(5) Learn Your Way at Your Pace

We deliver our curriculum through various training formats—classroom, in-company, online, or a combination. You choose the format that fits your purpose and preferred method of learning—or ask one of our academy advisors to guide you.

Xebia is an international consulting and training company, specialized in digital transformation. Xebia employs over 6,000 consultants worldwide. Xebia's values:

- > People First
- > Sharing Knowledge
- > Customer Intimacy
- > Quality Without Compromise



Data and Al Learning Journeys

A training course should not just be a single moment of development. It works best when it's part of a broader program. At Xebia, we call these programs Learning Journeys.

Learning Journeys guide you through our curriculum and ensure the courses meet your needs and provide an effective development path. For example, our three Python courses take participants from beginner to expert, after which you can choose a specialization course to further hone their skills.

The Necessity of Learning Journeys

Without guidance, it can be challenging to invest time and resources in an optimum course for professional development — one that is relevant to your job and aligned with your organization's business objectives.

Instead, it's tempting to follow the latest buzz or ignore the relevance of what they learn. Will you become more effective thanks to what you've learned, or does your development end once the training is over?

Such an ad-hoc approach to continuous professional development creates various issues, such as problematic progress tracking and gap measurement. Learning Journeys address these problems.

Benefits of Learning Journeys

The journeys are designed to overcome the drawbacks of working independently with little quidance:

(1) Applicability is high. Learning Journeys are designed by our expert consultants with working experience in the field, to ensure relevance to the participant's role and business needs.

- (2) Learned material is applied and tested in practice through use cases. For example, an aspiring data scientist will be working on relevant use cases.
- (3) Measuring impact on the workforce is much easier since employees follow similar paths. Small variations average out, and a clear picture emerges.
- (4) Designed by the business to satisfy current and future needs, Learning Journeys are a valuable investment in individual careers and in the company as a whole.
- (5) Current and potential employees can advance their careers through carefully crafted learning paths.

We have designed Learning Journeys for analytics translators, data scientists, and data engineers. You can find each Learning Journey in this guide:

- » Analytics Engineering Learning Journey Page 7
- » Analytics Translation Learning Journey Page 11
- » Data Analyst Learning Journey Page 16
- » Data Scientist Learning Journey Page 21
- » Machine Learning Engineering Journey Page 43
- » Data Engineer Learning Journey Page 59

Go to the academy

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Advice and Inquiries

Need advice on which course is right for you? Curious about setting up the perfect data and Al in-company program?

Our director of sales, Marcel van Denderen, is available to answer your questions. Get in touch at +31 6 3623 7853 (phone or WhatsApp), or send an email: marcel.vandenderen@xebia.com

Analytics Translation

With the rise of Agile and Scrum, the number of Agile coaches, product owners, and Scrum Masters skyrocketed. People in these roles supported professionals around them in getting the most out of the methodologies.

With data and AI, the roles are reversed: it's not the project framework that requires a new position; the technique does. There is a real disconnect between the people creating data and AI solutions and the ones using them. We witness it every day in our consultancy work.

The business often lacks the knowledge or inspiration to go beyond dashboards. On the other side of the spectrum, data engineers and data scientists can be overeager to push the newest techniques without accounting for business value.

Neither side has proved capable of closing the gap, which is where the Data Science Product Owner, also called Analytics Translator, comes in. This professional knows the possibilities and limits of data and Al and has a deep understanding of the business. These qualities combined make the role well-suited to both data-savvy product owners, as well as data professionals with good organizational sensitivity.

Learning Journey

By bringing together business demand with data science capabilities, analytics translation is the skill of leaders that bring ideas to implemented AI solutions. Analytics translation plays a central role to bring use cases to production effectively. Whether you work as an IT, analytics or business manager, product owner, Agile coach, or subject matter expert, this training will deepen your knowledge of how to develop successful data and AI products.

Learning Goals for an Analytics Translator

- > Acquire the basics, possibilities, and trade-offs of data and Al
- > Understand the analytics approach, use case creation, and idea prioritization
- > Learn the challenges of fairness and ethics in data and AI, and how to overcome bias
- > Be able to ensure successful implementation and use of data and Al solutions for the end-user

Analytics Translation Learning Journey



Innovation Through Experiments







Learn how experiments contribute to innovation, and how to successfully communicate with the data science teams who run them.

In business, it's important to know if changing something will improve it or not. When Google chooses a color for its home page, it uses experiments to decide between two variations. This one-day Innovation Through Experiments training, designed for managers and product owners, provides a foundation in statistical experiments, so you can successfully communicate with data science teams.

This training IS for you if...

- ✓ You are a product owner or manager of a data science team.
- You are interested in knowing how statistical experiments should be conducted, but won't be running them yourself.

This training is NOT for you if...

X You want to be the one using technical skills to conduct your own A/B tests (check out our A/B Testing and Experiments course instead).

After the training, you'll be able to

- ✓ Use best practices for running experiments
- ✓ Avoid common pitfalls in A/B testing
- ✓ Confidently speak to others about the statistics required for A/B testing

Course Topic Details

- ✓ The need for A/B testing
- ✓ How to design meaningful experiments
- ✓ Using intuition backed by statistics to make decisions
- Common mistakes and how to avoid them

Program

- ✓ The importance of A/B testing
- How to design an experiment
- Understanding statistics intuitively
- Common mistakes and how to avoid them

Certified Analytics Translation







Learn how to identify, develop, and execute AI use cases.

Learn how to successfully identify, develop, and execute AI use cases in your organization in this certified Analytics Translation training. This course empowers you to drive the development of AI solutions that match business needs and add value to your organization. Whether you are an analytics translator, product owner, subject matter expert, business developer, Agile coach, or project manager — connecting business and technology will help you take the next step in your Data and Al career.

This training IS for you if...

- ✓ You believe that data science is more than setting up a data pipeline and creating an analytical model.
- You want to know how to develop Al solutions with business objectives in mind.
- ✓ You're curious about the connections between business and technology.
- You want to take the next step in your Data and Al career.

This training is NOT for you if...

- You want to learn how to code (check out our Python for Data Analysis training instead).
- X You don't care about the adoption of the solutions that you build.
- You'd rather not talk to people.

After the training, you'll be able to

- ✓ Gain value from data by developing Al solutions.
- ✓ Generate Al use cases
- Assemble the right team to develop Al use cases
- ✓ Facilitate the process from proof-of-concept (POC) to minimum viable product (MVP) to a production-ready solution

Course Topic Details

- ✓ Introduction to Analytics: A non-technical introduction to AI, analytics, data science, and a few analytical models to ensure we're all on the same page with terminology
- ✓ Value Chain of Data Science: From data to business value — a helpful framework for designing your analytics solutions.
- ✓ Al Solution Framework: A method for transforming an initial analytics idea into an analytics product embedded in the business. The AI solution framework is an end-to-end, stage-gate process that moves through the ideation, experimentation, and industrialization phases.
- ✓ Ideation Phase: Collect, prioritize and refine ideas into a use case.

- ✓ Experimentation Phase: Create a proof-of-concept (POC) tested in practice.
- ✓ Industrialization Phase: Transform your minimum viable product into an embedded analytics solution.

Program

Day 1

- ✓ Introduction to Analytics
- ✓ IThe Analytics Process
- ✓ IThe Value Chain of Data Science
- ✓ IRoles, Tasks, and Responsibilities in AI Use Cases (a learning simulation)
- ✓ IAI Solution Framework Overview

- ✓ AI Solution Framework-Part 1: Ideation Phase
- ✓ Al Solution Framework-Part 2: Experimentation
- ✓ AI Solution Framework-Part 3: Industrialization Phase

Advanced Analytics Translation





(E) 7 half days + personal coaching session Advanced



This Advanced Analytics Translation training delves into the first phase of the Al Solution Framework: the ideation phase. We address hosting an ideation session, building a value case for a data science product, and successfully interacting with stakeholders to make it all happen.

This training includes a personal follow-up with the trainer one month after the course. During this one-on-one coaching session, you will discuss your business case and receive feedback and insights.

This training IS for you if...

- You participated in the Certified Analytics Translation Training (or an in-company equivalent).
- You want to host successful ideation sessions
- You want to build a value case for an Al solution.
- You need to communicate with various stakeholders effectively.

This training is NOT for you if...

- X You've never heard of the value chain of data science or the Al solution framework (book the Certified Analytics Translation training instead).
- X You'd rather sit back and wait for use cases to come in.
- You don't care about creating Al solutions with business value in mind.

After the training, you'll be able to

- ✓ Successfully host ideation sessions
- ✓ Effectively communicate with your stakeholders
- ✓ Build a solid value case for your Al solutions

Program

Day 1

- ✓ Frameworks for structured thinking
- ✓ Ideation session

Course Topic Details

- ✓ Ideation Session: Build a driver tree to identify analytics opportunities, starting from the business value.
- ✓ Value Case for an Al Solution: Build a value case that comforts the controllers in your organization.
- ✓ Effective Communication: Learn how to structure a compelling, message-first story.

Day 2

- ✓ The business case for an Al solution
- ✓ Pyramid thinking
- ✓ Successful stakeholder interactions

PLUS: 1-hour Personal Coaching Session (one month after the course)

- ✓ Discuss and improve your business case
- ✓ Set actionable goals to make your Al solution a success

The Tech to Randstad's Touch - Alexander Croiset

When the conversation with Alexander Croiset turns to the subject of data, his face lights up. "I'm all data! I love to analyze things," he beams. As an analytics translator at Randstad (also known as a data science product owner), he is a significant driver in making Randstad a more data- and value-driven organization.

Tech and Touch

Spanning 38 countries, with more than 4,800 offices and close to 700,000 people working through Randstad every day, the company is a force in the staffing industry. As an HR company that is focused on the 'soft side of business', Randstad's decision-making process was not always data-driven, but around eight years ago that started to change.

It changed so much that Randstad now takes a "tech and touch" approach. As Alexander explains, "We're experiencing an extreme acceleration toward data-driven working. Our tech side supports our touch side — our HR consultants who link talent and organizations — with solutions like matching algorithms to improve the process of finding the right person for the right job."

Linking Data Science with the Business

In his role as analytics translator, Alexander bridges the gap between business needs and data science solutions. "On the business side, many people used to make decisions based on feeling," he elaborates. "I always ask them to show me data. By finding the right data, I try to answer their questions."

Becoming Value-Driven

Alexander wanted to improve his skills so he could be a more effective link between data science and the business. "At Randstad, you can always develop yourself. One of my colleagues recommended the Certified Analytics Translation training from Xebia."

"What I liked most about the Certified Analytics Translation training is that it is very applicable. The cases are based on real-life experiences from the Xebia consultants. The cases they discuss during the course are very valuable." The training supported Alexander in becoming more value-driven. "Within a big company like Randstad, it's easy to start a big project. The value of the project used to be the last thing people thought about."

The training focuses extensively on how to prove value at every step of the project, something Alexander has implemented in his approach.
"We compartmentalize all our experiments into different stages. At the end of every stage, we validate if we still create value. For me, it's much easier to advise on a project because of what I've learned during the training about being value-driven," he said.

Are you interested in the Certified Analytics Translation training?



In-company Data and Al Learning Journeys

Do you want to tackle data issues with the people who understand them best? With our in-company programs, you learn from expert trainers and your colleagues. We give your organization the most effective training programs so your employees can be even more successful data professionals.

Our Approach

A successful in-company program depends on more than the course itself. With our four-step approach, we ensure that your organization achieves maximum value.

(1) Intake

We conduct an intake to discuss the project, challenge, or issues you want to tackle. During the intake, we also explore any ideas you may already have about the execution of the in-company program.

(2) Advice and offer

Based on your needs, our team gets to work in creating a comprehensive program. Together, we refine and adjust it.

(3) Execution

We discuss the specifics of the program with the trainer and also send an intake form to all participants so we know their knowledge level and learning goals. Our academy coordinator provides the necessary course material and participants improve their skills and gain knowledge through theory, hands-on labs, and discussions.

(4) Follow-up

After the training, we conduct an extensive evaluation and use this input to improve the program. We continuously update our courses to ensure that they are current with the latest information, techniques, and technologies.

After the program, we can support your organization and your employees in getting even more out of the courses. This can be achieved through coaching, follow-up days, or more in-depth and specialized additional courses.

The 7 Benefits of In-Company Courses

(1) Adapted to your situation

With an in-company program, we can adjust the course material to your needs, challenges, and specific situation. This makes the course even more applicable.

(2) Extensive offering of over 25 courses

All our public classes are available as in-company courses. Next to that, we have a host of courses exclusively available for in-company programs. Do you have a data and Al challenge but don't see the right course? With our varied expertise, we can shape the right course for you.

(3) Best trainers

All our trainers are practitioners in the field. Through their work as consultants, they solve challenges like yours every day.

(4) You decide on the right place and time

You decide what works best for your employees — in-house or external. Want a specific date?

No problem, it's up to you.

(5) Financially attractive

Our in-company programs are available starting at six participants, making them cost-efficient.

(6) High quality, with an average score of 8.7

Participants in our courses are highly satisfied with the quality of their learning.

(7) Intensive guidance throughout the process, from start to finish

We collaborate closely to shape the program you need. Our skills advisors, academy coordinators, and trainers support you every step of the way.

From Team to Boardroom – Data and Al Courses for Your Entire Organization

Embedding data-driven decision-making in your organization by leveraging Al products needs more than just a good data team. You cannot become fully data-driven without executives sponsoring use cases and leading by example. Projects fall short when the business challenge is not connected to the technical one by data science product owners. Your general workforce requires to be open to data and Al and knowledgeable about the changes they bring. That's why we provide programs for your entire workforce.

C-Level and Executives

There can be no project without buy-in, and to have buy-in, your C-level and other executives need to understand the possibilities and pitfalls of Al. Our programs provide them with a deep understanding of data and Al, but also what it takes to generate successful use cases and their role in sponsoring these. This way, Al solutions can be developed more quickly, but also with a better focus on value generation.

Data Engineers and Data Scientists

We deepen and widen the skills of your data engineers and data scientists. With our programs focused on Python, Spark, Airflow, and Docker, they will increase their ability to effectively and efficiently use these critical techniques.

With courses such as Deep Learning, A/B Testing, Time-Series, and Recommenders, they acquire more specialized knowledge and skills.

Data Science Product Owners

Whether you call them data science product owners, analytics translators, business translators, or Al consultants—they all support the connection between data teams and the business.

We teach these product owners how to generate Al use cases, check the value of a project every step of the way, and ensure the business fully adopts and uses Al solutions.

General Workforce

Your general workforce might be the most critical part of your data-driven transformation.
Without support from the business, there can be no success in data and Al. They are the people that will drive the adoption of the data products and ultimately change the way you do business.

Empowering them with knowledge of data and AI and informing them about the possibilities creates analytics ambassadors throughout your entire organization. We do this with online courses, workshops, and board games, to name a few of the options. Employees will be able to generate powerful ideas on what data and AI products can enhance their work and how to work with data science product owners on generating use cases.



In-company Courses and Programs

Are you looking for a course to teach your data engineers more about Apache Airflow? Or do you need a full program to take your organization's data scientists from juniors to seniors? At Xebia, we have the right expertise to offer the flexibility you need. We are happy to show you some examples of our work.



Data Engineering and Data Science Accelerator – ING

For ING, we executed the full data engineering and data science learning journeys described earlier in this guide. With a 13-month/13-modules program, ING's data professional went through an entire journey from junior to senior. Each of the 13 modules featured one day of theory and one day of hands-on labs. The program's breadth covered the full spectrum of relevant knowledge for data engineers and data scientists.



Data Science Specialization Training – ABN AMRO

ABN AMRO's wide variety of products and departments creates a training challenge. To ensure applicability and benefits for all of its data scientists, the training program was set up as a set of singleday courses focusing on several data science specializations, including reinforcement learning, recommender systems, and data science engineering.

Data Discovery Workshops – Schiphol and ING

To educate C-level executives, managers, and the general workforce on the "art of the possible" for data and AI, Xebia regularly hosts Data Discovery Workshops. In these workshops, participants get to work on creating data and AI use cases they can apply in their work. For ING, we organized these workshops as a worldwide program for their C-level executives. At Schiphol, we joined the internal innovation week, showing managers and employees what they can achieve with data and AI.



International Data Science Program – DSM

Chemical enterprise DSM asked Xebia to design an international program to enhance its internal data science capabilities. With courses taught in the Netherlands, the United States, and Switzerland, the program contained foundational, intermediate, and advanced courses on Python. Some of the classes came from Xebia's standard offerings, while others were created especially for DSM.



Apache Airflow Ask Me Anything – Bosch

Bosch Germany was searching for possibilities to improve Apache Airflow expertise within the company. As Bosch's data engineers already possessed solid knowledge of Apache Airflow, they did not just want a training course. Bosch asked Xebia for the best approach, and together we decided to send our most senior Apache Airflow expert. This expert was on-site at Bosch for two days to answer all questions about Apache Airflow and give hands-on support on active projects.



Advanced Apache Spark Users – Schiphol

In addition to training programs, Xebia worked with Schiphol on a data engineering consultancy. During this consultancy, Schiphol employees learned the finer details of Apache Spark and were eager to further improve their skills. Xebia, therefore, provided Schiphol's data engineers with an Advanced Apache Spark course, going far beyond the standard Data Science with Spark course.

Supporting bol.com as a Frontrunner in Data and Al

Customer Challenge To enhance in-house data engineering and data science capabilities and remain a frontrunner in data and AI.

Our Solution An extensive in-company training program comprised of 15 to 20 courses per year, running since 2018.

Outcome Professionals working at bol.com maintain up-to-date skills with the latest data engineering and data science technologies. They can apply the knowledge they acquire in training to their day-to-day work, supporting bol.com's business.

Data for Decision-Making First

Founded in 1999 as a pure internet company, bol.com doesn't have the baggage of traditional organizations in becoming data-driven. The company's advanced analyst Melissa Perotti explained, "Decision-making at bol.com is based on data first. The data doesn't confirm someone's hunch; it tells us where to go."

As the largest e-commerce platform in The Netherlands and Belgium, bol.com has vast amounts of data for decision-making at its fingertips. "We use data science in many places—our search engine and recommender systems, forecasting of sales and customer service, and our chatbot. We have a mature data landscape and are proud of what we have achieved so far—and we're ready to take it all the next level."

Over the past two years, bol.com's data science capability quickly matured and now the shopping platform's next challenge is to extend this beyond its data engineers and data scientists.

Great Fit with Xebia

For the data engineering and data science training program, bol.com looked for a partner to support their journey. The two main criteria for its program were applicability and being up-to-date with the newest theories and models. After comparing different partners, bol.com chose Xebia. "Xebia understood how we saw our data science capability, and where we wanted to go," said Perotti. "It was also really

flexible in setting up the programs, so the courses were perfectly tailored to our situation, and the material was very applicable in our work."

A Wide Host of Courses

The in-company training program offered a wide range of courses to data professionals at bol.com. Courses included programs for data science starters like Python for Data Analysts, but also more advanced courses such as Deep Learning.

Most of the courses are part of the curriculum Xebia offers and were adapted to fit bol.com's needs. For example, the A/B Testing and Experiments course was split into a technical and a non-technical training. The technical training focused on data scientists and ways they could apply experimenting in their day-to-day work. The non-technical training was aimed at managers, to give them an insight in the possibilities.

Extending the Training Program

After providing several courses for bol.com in 2018 and 2019, the program has been extended into 2020 with several additional courses.

Xebia has been heavily involved in setting up and supporting the program. "What is great about the program with bol.com is that we really work together on the execution," he explained. "After every training, we conduct an extensive evaluation to see if there are things we can improve from either side."



Data and Al Accelerator Program for Enterprises

Transforming into a Data-Driven Global Enterprise

As an enterprise, how do you become fully data- and Al-driven? Ingraining data and Al into the DNA of your employees' way of working is an immense challenge. We can help you climb that mountain.

Gain Hands-On Experience with Data and Al

In collaboration with you, GoDataDriven shapes and executes this program, from baseline assessment to delivering training and executing AI use cases.

What makes the program so effective and unique is the combination of learning methods. It's more than a classroom or online course. All participants go handson with data and Al and create their own use cases.

For the Entire Workforce

The Data and AI Accelerator Program is specially designed for enterprise organizations that want to upskill their entire workforce. It offers learning journeys, courses, and certifications for every type of employee.

Whether it's C-level executives, data scientists, or employees who rarely touch data, this program covers everyone's training needs.

Why Enterprises Love the Data and Al Accelerator Program

Program Design from Start to Finish

We design the full Data and Al Accelerator Program with you. The program's design is completely tailored toward your organization's goals, challenges, and capabilities.

Authority From the Field, Like No Other

All our trainers work in the field as consultants. They experience and solve challenges like yours every day. Your organization will benefit enormously from this experience. We don't come from an abstract background — we are practitioners as much as we are teachers.

High Satisfaction Rate

The Data and AI Accelerator Program at ING was an overwhelming success. Participants rated their training courses with an 8.5. The program enabled ING to establish best practices and a standardized way of working, letting ING tackle Al challenges better than ever.

Learn Today, Apply Tomorrow

Applicability of our training courses is a core GoDataDriven value. Our programs are designed so your employees can apply their new knowledge immediately. In the Data and Al Accelerator Program, every trainee participates in data and Al use cases, giving them direct hands-on experience and a deeper understanding.

Five Elements of the Data and Al Accelerator Program

The Data and Al Accelerator Program is designed using a set framework. This allows for both quick implementation and flexibility to tailor the program to your needs.

(1) Assessment and Goal-Setting

We assess the baseline capabilities of your workforce, determine the personas, and set goals for the desired end result.

(2) Learning Journey Design

With the start and end points determined, a learning journey is designed for each persona. This learning journey includes all types of training, examination, and certification, together with governance and training logistics.

(3) Curriculum Creation

We review and update our existing material and create new material if required. To ensure the material fits with your employees, we field-test it with selected colleagues.

(4) Program Execution

Our trainers work on upskilling your employees to become truly data- and Al-driven. The program includes a mix of classroom and online training, meetups, and hackathons. We constantly update the course material, so your employees will always have the latest information.

(5) Evaluation and Improvements

After each session, participants fill out an evaluation. Based on their feedback, we evaluate the session and improve future sessions.

Securing Budget for Your Training Course

Throughout this guide, we have emphasized the necessity of staying up-to-date for data professionals. The Internet of Things, the growing power of cloud providers, ever-changing technologies, specialization—these are all valid and urgent reasons to develop your skills. However, these reasons are also rather generic. If you want to free up a training budget at your organization, what should be your approach? How do you make your case clear and convincing?

Need a helping hand in preparing your case? Get in touch with our director of sales, Marcel van Denderen, at marcel.vandenderen@xebia.com or +31 6 3623 7853.

Talk to HR and Your Colleagues

The best place to start is HR. They will be able to tell you whether there is a policy for the training budget and any requirements. Sometimes it's as simple as putting in a request or picking one of the options in your company's training portal.

Does your organization not offer a standard training budget, or is there no policy? In that case, ask your colleagues. If they have attended a course in the past, they can tell you what their approach was.

Do Your Research

If freeing up training budget requires you to convince your manager, it's vital to conduct a proper investigation into the different options. You may feel you will benefit from a three-day course, costing around €1,800, but your manager might have a very different view.

Research the various options, and be open-minded about what you find. A €20 Udemy course might not be a great option, but clarify for yourself why it's not. This will help you convincingly present your case.

Prepare Your Case

It's essential to present a well-prepared case that shows why your preferred training option is best. Start your case with the conclusion—explain the value your proposed course will bring to the company. How much money will it save, how much faster will you be able to deploy a model? Of course, your manager is interested in your development, but they also need to validate the expense. This is why it's important to emphasize its value for the company.

In addition to demonstrating the value, it's wise to show alternatives and how they relate to your preferred option. It may sound counterintuitive, but it's likely that your manager or HR will ask about potential alternatives. Being prepared and presenting sound reasoning for your choice only strengthens your case.

Show the Value

Validating your chosen course doesn't end when you receive approval. Before attending the course, have a clear plan for what you want to learn and how you intend to apply it. When returning to work, put your learnings into practice and show your manager the results you have generated and the value it has delivered for your organization.

Big Enough to Deliver, Small Enough to Care

At Xebia, we have been delivering data training courses since 2010. Over the past decade, we have dedicated a lot of time in laying the foundation for our unique curriculum and refining it with every iteration. Based on our own experiences, we are able to bring the practical skills professionals need to add value

every day. We deliver training world-wide for global enterprises, but make sure to provide a personal experience for every participant. Not only with content and delivery methods that seamlessly fits their needs, but also by delivering training in many popular languages.

Our training numbers









460 companies served

1,412days of training

18,080+

8.9/10 satisfaction rating

people trained

Our Track-Record

We are full stack

We organize, we build, we train. Everybody is talking about data and Al. Our team has been implementing scalable data solutions since 2009.

In-depth knowledge

We contribute to Apache Airflow, Apache Kafka, Keras, Scikit-learn, pandas, Apache Avro, Apache Parquet, Apache Flink, Apache Spark and many more.

Learn today, apply tomorrow

Battle-tested during more than 10,000 hours of classroom training, the extensive, hands-on curriculum has been developed with applicability in mind.

Each trainer is a consultant

We bring real knowledge from the trenches. Xebia has the expertise — built through years of working with the top enterprises in Europe.

Our Global Training Delivery Capabilities

Our international group of expert trainers delivers classes in the most popular European languages. Our trainers are native in Dutch, English, France, German, Italian, Spanish.



Trusted by Global Leaders







Uber (DUPONT) Booking.com























































Practical information

Trainer Overview



Alexander Bij



Cor Zuurmond



Daniel van der Ende



Herbert van Leeuwen



James Hayward



Juan Perafan Rodriguez



Julian de Ruiter



Kris Geusebroek



Lucy Sheppard



Lysanne Van Beek



Manolis Manousogiannis

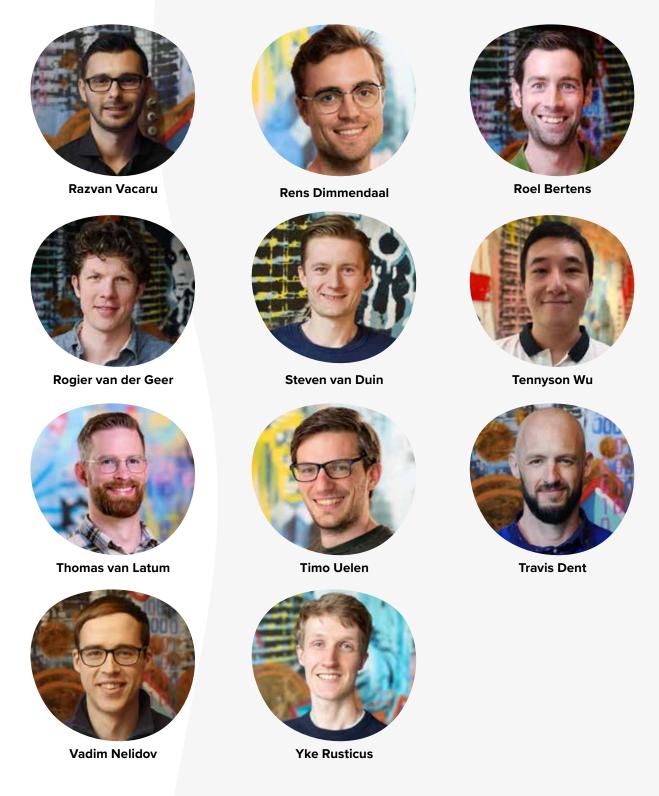




Nelli Gofman



Pádraic Slattery



Xebia Academy Team for Data and Al Learning Journeys

Giovanni Lanzani – Managing Director Data

As managing director data of Xebia's Academy, Giovanni is responsible for the content of our courses and learning journeys. He also leads Xebia's own development efforts.

Marcel van Denderen - Sales Director

Marcel is responsible for all sales of the Xebia Data and Al Academy. If you want to improve the data and Al skills of your employees with one of our in-company programs, Marcel can advise you on the best setup.

Nico de Jonge – Head of Business Development

Nico is frequently in touch with organizations all over the world about their challenges in data literacy. If you have questions about upskilling your organization, team or self, Nico is happy to help you on the best way to move forward.

Diego Teunissen – Learning and Development Consultant As a Learning and Development Consultant, Diego is responsible for the public courses on data and Al at Xebia Academy. The data field is dynamic like no other. Keeping your skills up to date is key to staying ahead. If you need advice on which training course fits your learning goals, Diego is always there to help you or your team further.



Giovanni Lanzani



Marcel van Denderen



Nico de Jonge



Diego Teunissen

Frequently Asked Questions

How can I get advice before booking a course?

Diego Teunissen, Learning and Development Consultant, or Marcel van Denderen,
Director of Sales, will happily answer your questions and advise you on our courses.
You can reach them via email, or by phone:
Diego Teunissen,
diego.teunissen@xebia.com,
+31 6 1591 4440
Marcel van Denderen,
marcel.vandenderen@xebia.com,

I'm interested in attending a course that is not on the current schedule. What do I do?

+31 6 3623 7853

We plan training courses throughout the entire year, so if you don't see the course of your choice on the schedule, there's still a chance we could add it. Get in touch with Marcel van Denderen to discuss t he possibilities via email, marcel.vandenderen@xebia.com, or by phone, +31 6 3623 7853.

Can I cancel a booked course?

If you are unable to attend a booked course, please send an email to academy@xebia.com. If you cancel up to one month before the first training day, there is no cancellation charge. Cancellations between one month and two weeks of the first day pay 50%. If you cancel a course within two weeks of the first training day, we charge the full price.

Do I receive a certificate after attending a course?

Yes, you will receive a Xebia Certificate of completion after completing a Xebia course.

Do I need to bring a laptop and install any software?

All of our courses include extensive hands-on sections requiring a laptop. The need to install software differs between courses. Please refer to the specific course information for details. You will also receive a confirmation email shortly before the training date that lists any requirements.

Training	Duration	Topic	Level	Page	More info at
A/B Testing and Experiments	2 days	Data Science	Fundamentals	27	gdd.li/ab-testing-exp
Advanced Analytics Translation	2 days	Analytics Translation	Advanced	41	gdd.li/advanced-analytics-translation
Advanced Data Science with Python	2 days	Data Science	Advanced	31	gdd.li/adv-ds
Advanced Power BI	2 days	Data Analysis	Specialty	20	gdd.li/da-advanced
Analytics for Executives	4 hours	Analytics Translation	Fundamentals	7	gdd.li/analytics-for-executives
AWS Cloud Fundamentals	1 day	Machine Learning Engineering	Fundamentals	45	gdd.li/cf-aws
Bayesian Statistics Training	2 days	Data Science	Fundamentals	28	gdd.li/bayesian
Big Data on AWS	3 days	Machine Learning Engineering	Advanced	41	gdd.li/aws-big-data
Certified Analytics Translation	2 days	Analytics Translation	Fundamentals	13	gdd.li/analytics-translation
Certified Apache Airflow	2 days	Data Engineering	Advanced	99	gdd.li/apache-airflow
Create Data Science Products	2 days	Data Engineering	Advanced	63	gdd.li/ds-products
Data Processing at Scale	3 days	Data Engineering	Fundamentals	48	gdd.li/data-scale
Data Science with Python (Certified)	3 days	Data Science and Machine Learning Engineering	Fundamentals	25/48	gdd.li/python-certified
Data Science with Spark	3 days	Data Science	Specialty	38	gdd.li/ds-spark
Data Visualization and Storytelling	2 days	Analytics Engineering and Data Science	Advanced	10/24	gdd.li/data-visualization
dbt Learn	3 half-days	Analytics Engineering and Data Engineering	Fundamentals	8/61	gdd.li/dbt-learn
Deep Learning	3 days	Data Science	Specialty	36	gdd.li/deep-learning
Deep Learning for Natural Language Processing	2 days	Data Science	Specialty	45	gdd.li/deep-learning-nlp
Docker	1 day	Machine Learning Engineering	Fundamentals	52	gdd.li/docker
Docker and Kubernetes	3 days	Data Engineering	Fundamentals	65	gdd.li/dockerkubernetes
Google Cloud Platform Fundamentals: Big Data and Machine Learning	1 day	Machine Learning Engineering	Advanced	23	gdd.li/gcp-big-data-ml
Google Cloud Fundamentals: Core Infrastructure	1 day	Machine Learning Engineering	Fundamentals	46	gdd.li/gcf-core-infrastructure
Innovation Through Experiments	1 day	Analytics Translation	Fundamentals	12	gdd.li/innovation-experiments
Kubernetes	1 day	Data Science and Machine Learning	Advanced	22	gdd.li/kubernetes

Machine Learning Explainability	1 day	Data Science	Advanced	34	gdd.li/ml-exp
Certified Microsoft Azure Fundamentals (AZ-900)	1 day	Machine Learning Engineering	Fundamentals	20	gdd.li/cf-azure
Microsoft Certified: Azure Data Scientist Associate	3 days	Machine Learning Engineering	Advanced	54	gdd.li/azure-data-science
Microsoft PL-300	3,5 days	Data Analysis	Advanced	8	gdd.li/power-bi-pl-300
MLOps Training	2 days	Machine Learning Engineering	Advanced	26	gdd.li/mlops-training
Optimizing Apache Spark and Tuning Best Practices	2 days	Data Science and Data Engineering	Specialty	40/68	gdd.li/optimizing-spark
Power BI in a Day	1 day	Analytics Engineering and Data Analyis	Fundamentals	9/17	gdd.li/da-power-bi
Production-Ready Machine Learning	2 days	Data Science and Machine Learning Engineering	Advanced	33/51	gdd.li/prod-ml
Python for Data Analysis	2 days	Data Science	Fundamentals	23	gdd.li/python-da
Python for Data Engineers	2 days	Data Engineering	Advanced	62	gdd.li/python-engineer
Streaming Architecture at Scale	2 days	Data Engineering	Specialty	20	gdd.li/arch-scale
Time Series Analysis and Forecasting	2 days	Data Science	Advanced	29	gdd.li/time-series



