



Certified Data Analyst (AI)

100% free with a **Bildungsgutschein** from the Arbeitsagentur

FOCUS

TOP
ANBIETER FÜR
WEITERBILDUNG
2026

XDi
Experience Design
Institut

FOCUS.DE/BUSINESS

Discover the world of data analysis

Join our data analysis class with a Bildungsgutschein to become a Certified Data Analyst. Study online at your own pace with mentor support, and develop expertise in database management, exploratory data analysis and dashboarding. Kick-start your career with a well-paid, rewarding job and graduate with an AZAV certificate.

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An overview of your career

Learn at your own pace with this data analysis-bootcamp fully online and flexible, whenever and wherever it suits you. Design your learning journey and advance at a rhythm that matches your lifestyle. Acquire in-demand, practical skills in database management, exploratory data analysis and dashboarding. Learn 1-on-1 with an experienced mentor, accompanied by your personal study advisor and our career coaches. Make yourself job-ready and secure a future-proof job.

Skills you'll master

- Data analysis and data analytics
- SQL database language and MySQL database management system
- MS Excel
- Basic statistics for data analysis
- Data analysis with Python: From zero to pandas
- Exploratory data analysis, data storytelling and visualization: 10 hands-on use cases
- Dashboarding and reporting with Power BI

Tools, techniques & methods



SQL



MySQL



Python



Pandas



NumPY



Matplotlib



Seaborn



Power BI



Excel



Dashboarding



Reporting



Visualization



Best Practices



AI-Tools

Details of your course



Format

Live Online Training &
E-Learning Selbststudium



Duration

Vollzeit: 3,5 Monate
Teilzeit: 7 Monate
Berufsbegleitend: 12 Monate



Start

Regelmäßiger, zeitnaher
Start



Scope

Vollzeit: 35 h / Woche
Teilzeit: 17,5 h / Woche
Berufsbegleitend: 2-4 h /
Woche



Languages

English
German

Benefits of our Live Online Training & E-Learning Selbststudium bootcamps



Interaktive Live Trainings mit Branchenexperten

Du nimmst an interaktiven Live Workshops mit Branchenexperten teil – so lernst du direkt vom Experten und erzielst nachhaltige Lernerfolge.



Job-ready Praxis in realen Projekten

Lerne mithilfe realer, branchenspezifischer Szenarien und erwerbe praxisnahe Fähigkeiten, die du unmittelbar im Job einsetzen kannst.



Unbegrenzter Zugang zu multimedialen Inhalten

Du profitierst von interaktiven Inhalten auf Hochschulebene! Wir vermitteln lebendiges Wissen mit Artikeln, Videos, Quizze und praxisnahe Übungen.



Jederzeit und von überall lernen

Passe deine Weiterbildung deinem Lebensstil an. Lerne online jederzeit und von überall. Laptop und Internetanschluss reichen aus.



Karriereservices für deinen neuen Job

Mit Bewerbungstrainings, Karrieresprechstunden und unserer aktiven Jobvermittlung helfen wir dir auf dem Weg zu deinem neuen Job.



Vollzeit

Du willst voll und ganz in data analysis eintauchen? Dann nimm an unserem Intensivkurs in Vollzeit teil.

- Abschluss in 3,5 Monaten
- Vollzeit online lernen
- 35 Stunden per Woche



Teilzeit

Du hast einen Halbtagsjob, Kinder oder anderweitige Verpflichtungen? Dann absolviere den data analysis-Kurs in Teilzeit.

- Abschluss in 7 Monaten
- Teilzeit online lernen
- 17,5 Stunden per Woche

Satisfaction guarantee

Try it for 14 days

Feel free to try the course risk-free for up to 14 days from the start date. If it doesn't meet your expectations, you may cancel your enrollment at no additional cost.



Our course is suitable for the following people



Arbeitslose oder Arbeitssuchende

Du bist arbeitslos oder arbeitssuchend, hast Anspruch auf einen Bildungsgutschein und willst die Zeit nutzen, um dich für einen neuen Job als Data Analyst zu qualifizieren.



Quereinsteiger und Berufsumsteiger

Du bist eine branchenfremde, berufstätige Fachkraft und möchtest Data Analyst werden, um dich beruflich zu verändern, zu wachsen und neue Chancen zu nutzen.



Von Arbeitslosigkeit bedrohte Angestellte

Du bist Mitarbeiter eines Unternehmens im Strukturwandel und dein Job ist in Gefahr. Mit einer kostenlosen Weiterbildung über den Bildungsgutschein nach dem Qualifizierungschancengesetz kannst du dich gezielt qualifizieren und deinen Arbeitsplatz sichern.



Fachkräfte & Spezialisten

Du bist Spezialist in deiner Disziplin, möchtest dein Fachwissen ausbauen, dich zertifizieren lassen oder dich optimal auf eine Zertifikatsprüfung vorbereiten.



Absolventen und Studierende

Du hast kürzlich dein Studium abgeschlossen oder studierst noch und willst deine akademischen Qualifikationen durch praktische, branchenrelevante Fähigkeiten erweitern.



Interessierte Personen

Du interessierst dich für data analysis und möchtest die praktische Anwendung von Data Analyst-Tools für persönliche oder berufliche Zwecke kennenlernen.

Die perfekte Mischung

für deinen Lernerfolg

Du profitierst von einer perfekten Mischung aus Live Trainings mit erfahrenen Trainern, hochwertigen E-Learning-Inhalten auf Hochschulebene und einer Community für Austausch und Zusammenarbeit.



Tägliche Live Trainings

- Tägliche Termine
- 35 Stunden per Woche
- 09:00 - 16:00



E-Learning

- Multimediale Inhalte
- Selbstbestimmt lernen
- Jederzeit und überall



Karrierservices

- Bewerbungstraining
- Karrierecoaching
- Jobvermittlung



Community

- Unbegrenzter Zugang
- Austausch & Zusammenarbeit
- Kollegen & Gleichgesinnte

Your career prospects and job opportunities

Take the next step in your career

Secure a job in one of the fastest-growing professions in the technology industry. Acquire in-depth knowledge in SQL, Excel, Python and Power BI. Develop exactly the skills you need for a career as Data Analyst. Secure an attractive, well-paid job with a future in the IT industry.

€ 56.500

Average annual salary

200

Average monthly job offers

+8-10%

Estimated employment growth by 2030

Top 10

Estimated employment growth by 2030



Project based learning

Hands-on practice. Capstone project.

Recognized portfolio that stands

Through project-based learning, we ensure a holistic, active, and sustainable approach to skill development that bridges theory and practice and optimally prepares learners for real-world challenges.

Our courses primarily focus on developing the skills that are essential for professional success and personal growth. Theory and practice complement each other, and participants are actively involved in the learning process.



Project with assignments and real-world case studies

Start your professional development and work on a real-world project! Tackle realistic tasks that will perfectly prepare you for your future job.



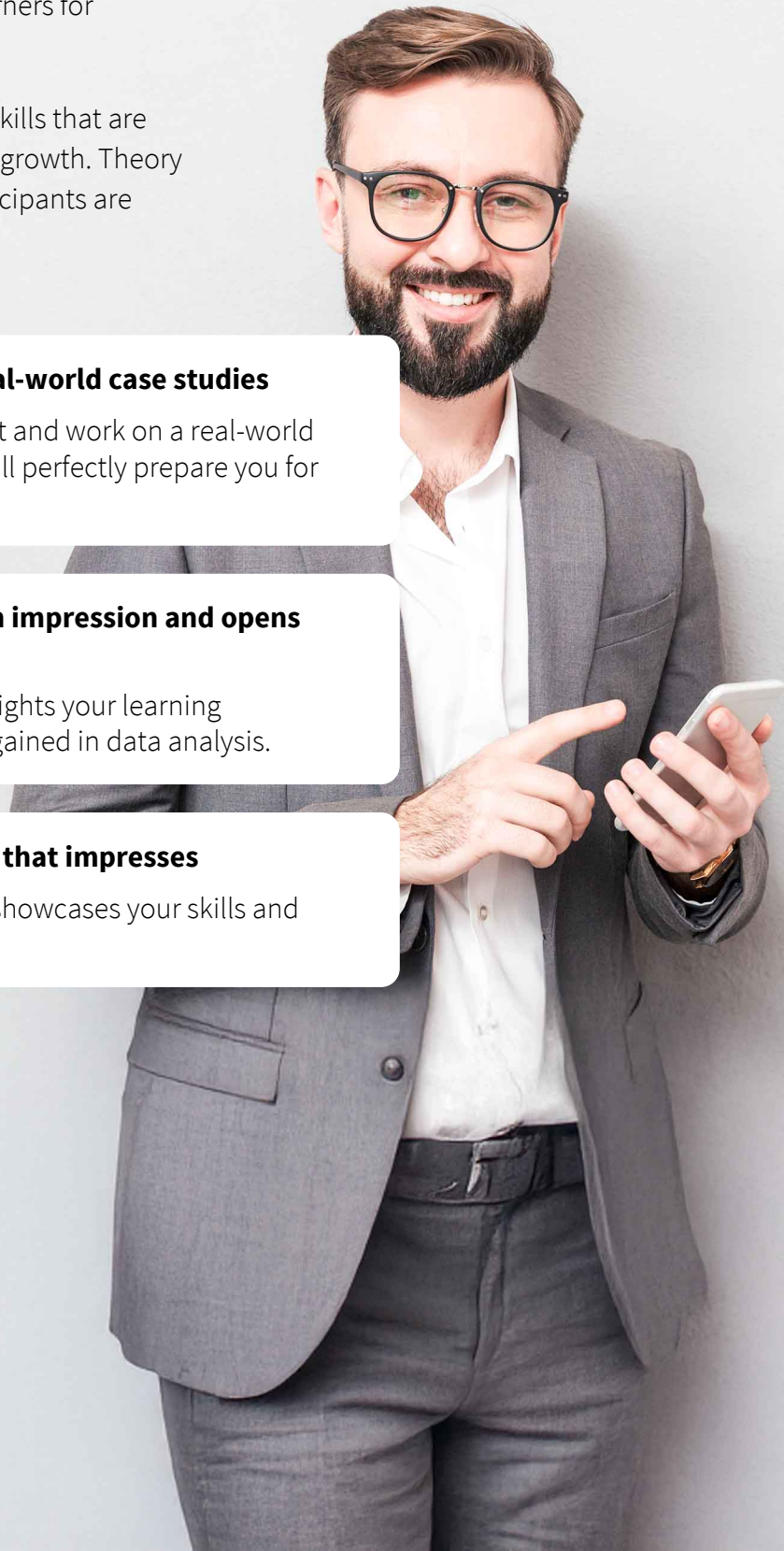
A capstone project that makes an impression and opens doors

Create a capstone project that highlights your learning achievements and the skills you've gained in data analysis.



An industry-recognized portfolio that impresses

Create an impressive portfolio that showcases your skills and opens doors with hiring managers.



CURRICULUM

What you will learn

Hands-on education in the skills of the future

In this data analysis course, you will acquire the most important skills based on a curriculum designed by industry experts. The data analysis training includes industry-validated, interactive content at a university level and extensive hands-on experience in real projects. You will build a portfolio and complete the program with a capstone project.

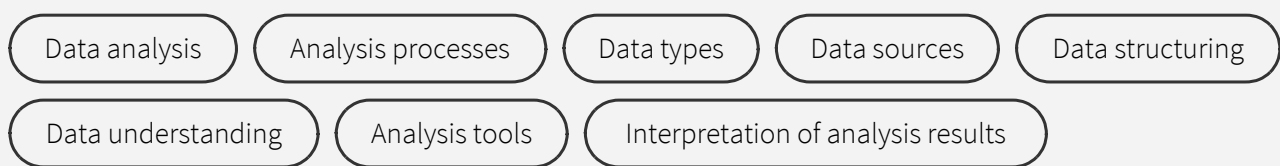


Module 1

Introduction to the world of Data Analysis and Data Analytics

In this module, you will gain an in-depth overview of key data analysis tools – including SQL, Python, pandas, Excel, and Power BI Desktop. You will learn about the most important steps in the analysis process and find out how to plan projects in a targeted manner, use resources wisely and minimize risks. You will use analysis tools to visualize data and identify factors influencing target figures. Finally, you will learn how to prepare and present even complex analysis results clearly and convincingly for stakeholders and decision-makers.

Core Skills



Learning Outcomes

You will learn:

- how to use central data analysis tools such as SQL, Excel, and Python
- to understand the steps in a data analysis process
- to undertake a practice-based example project with survey data and interpret initial findings

Content

- Welcome to the world of data analysis and data analytics
- Data analysis: tools, data sources, project planning, and process steps
- An exemplary data analysis project: survey responses from StackOverflow

Module 2

Databases and Database Management Systems: MySQL and SQL

In this module, you will be introduced to the basics of relational databases and familiarize yourself with the SQL query language. You will create databases and tables in MySQL Workbench, insert data, and develop structured queries. Step by step, you will work with central SQL concepts such as data manipulation, filtering, foreign keys, JOINS as well as aggregations, groupings and sorting – and apply them directly in practice.

Core Skills

Relational databases

SQL

Data queries

Data manipulation

Database structures

SQL commands (SELECT, WHERE, JOIN, GROUP BY)

MySQL Workbench

Query languages for structured data

Learning Outcomes

You will learn to:

- understand relational databases and the concept of tables, keys, and relationships
- create and configure their own database with MySQL Workbench
- insert, edit, and query data with SQL
- use conditions with the WHERE clause and JOINS to link multiple tables
- perform simple analyses with aggregate functions, grouping and sorting

Content

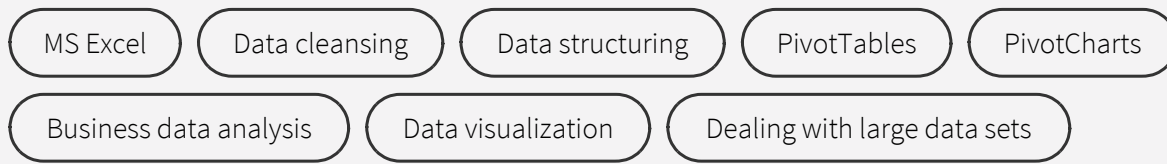
- Introduction to databases and database management systems: MySQL and SQL
- Installation and first steps with MySQL Workbench
- First steps: creating a database and tables
- Inserting, editing, and querying values
- Additional options for using the WHERE clause
- Using foreign keys in the database
- Joining queries for multiple tables
- The JOIN command: using data from multiple tables
- Counting entries, summing values and other arithmetic operations
- Grouping and sorting data

Module 3

From Zero to Hero with MS Excel

This module explains how to use Microsoft Excel specifically for data analysis. You will create structured tables, prepare data efficiently and clean it up for further analysis. The focus is on PivotTables and PivotCharts – from the basics to calculated fields, filters and customized visualizations. All exercises are based on realistic business data and will make you fit for the confident use of Excel in everyday analysis.

Core Skills



Learning Outcomes

You will learn to:

- create and format structured Excel tables for data analysis
- sort, filter, clean and prepare data in a targeted manner
- create and edit PivotTables and use them to analyze large amounts of data
- apply PivotTable formulas and integrate calculated fields
- use and design PivotCharts to visualize analysis results

Content

- Introduction: from beginner to expert: MS Excel
- Excel spreadsheet basics
- Preparation, manipulation and cleansing of data
- PivotTables: basics
- PivotTables: advanced
- Creating and using PivotTable formulas
- Using PivotCharts

Module 4

Basic Statistics for Data Analysis

In this module, you will be introduced to key statistical principles that you need for data-based decisions and sound analyses. You will work with location and dispersion measures, use statistical functions in Excel and apply methods of descriptive and mathematical statistics – including probability distributions, inference, and regression analysis. You will also get to know the Excel Solver for numerical optimization. Practical exercises with real data sets and tools such as the Excel Data Analysis Toolpak will help you to apply statistics directly.

Core Skills



Hypothesis tests

Statistical analysis with Excel

Database functions

Numerical methods

Data-based problem solving

Learning Outcomes

You will learn to:

- use Excel's database functions to efficiently manage and analyze data sets
- calculate and interpret descriptive statistics to gain insights from data
- use Excel's statistical database functions to perform more complex statistical calculations
- apply concepts of mathematical statistics such as probability, distributions and hypothesis testing in the context of Excel
- use numerical optimization techniques to solve practical problems and make data-based decisions

Content

- Introduction: fundamentals of statistics
- Using Excel's database functions for statistical data analysis
- Statistical database functions of Excel: deepening
- Descriptive statistics
- Mathematical statistics
- Numerical optimization

Module 5

Data Analysis with Python: From Zero to pandas

This module introduces you to the Python programming language in a practical way – with a focus on data analysis and typical business applications. You will work step by step with basic programming concepts such as variables, loops and functions and make targeted use of libraries such as pandas, NumPy and Matplotlib. The focus is on using pandas for data manipulation and exploratory analysis. You will also work with external data sources such as APIs or SQL and visualize your results directly in Jupyter Notebook – for clear, meaningful analyses.

Core Skills

Python programming

NumPy

pandas

Matplotlib

Data import

Data manipulation

Data automation

Analysis workflows

Visualization

Jupyter Notebook

Learning Outcomes

You will learn to:

- apply basic programming concepts in Python – including conditions, loops and functions
- clean, analyze, and prepare data with pandas
- perform numerical calculations with NumPy
- integrate external data sources such as APIs or SQL databases into Python
- visualize analysis results with Matplotlib in Jupyter Notebook in an understandable way

Content

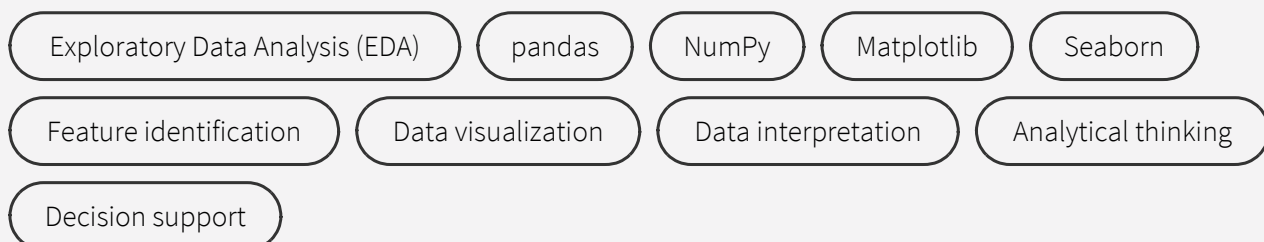
- Introduction: the wonderful world of Python, pandas, NumPy and Matplotlib
- Installation of Anaconda and Jupyter Notebook
- First steps with Python and Jupyter Notebook
- Variables and data types
- Branching and loops
- Functions and scope
- Numerical calculations with NumPy
- Data analysis with pandas
- External data (API) and internal data (SQL)
- Data visualization with Matplotlib

Module 6

Exploratory Data Analysis, Data Storytelling and Visualization: 10 Hands-on Use Cases

In this module, the focus is on the practical application of Exploratory Data Analysis (EDA). Using ten realistic use cases – from developer surveys and medical data sets to Netflix, FIFA and Pokémon – you will prepare and analyze data and present it visually. You will learn how to use clear questions, appropriate visualizations and effective data storytelling to gain meaningful insights and present them convincingly.

Core Skills



Learning Outcomes

You will learn to:

- apply the approach and objectives of Exploratory Data Analysis (EDA) in practice
- clean, analyze and examine real data sets with pandas and NumPy
- recognize and interpret patterns, trends and outliers in data
- use visualizations with Matplotlib and Seaborn specifically to display results
- present analysis results in an understandable and convincing way using data storytelling

Content

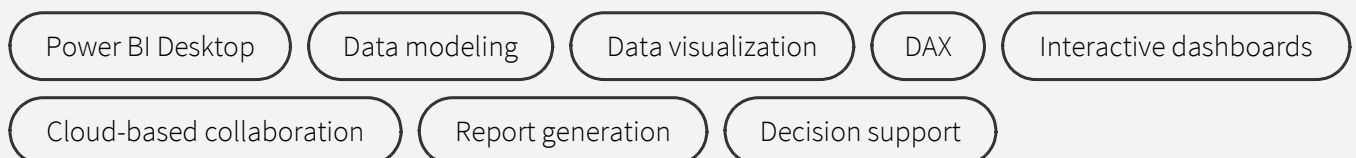
- Use Case 1 – StackOverflow
- Use Case 2 – Lending Club
- Use Case 3 – Heart Failure
- Use Case 4 – FIFA 21
- Use Case 5 – Cardiac patients
- Use Case 6 – Netflix movies and TV shows
- Use Case 7 – Formula 1
- Use Case 8 – National happiness
- Use Case 9 – Video game sales
- Use Case 10 – Pokémon with statistics

Module 7

Dashboarding and Reporting with Power BI

This module covers the complete workflow for creating compelling reports and interactive dashboards with Power BI. You will import data, model and process it and create meaningful visualizations. You will not only work with the basic functions, but also make targeted use of advanced calculations with DAX. Finally, you will learn how to publish your dashboards via Power BI Online and share them with your team – for professional BI use in practice.

Core Skills



Learning Outcomes

You will learn to:

- use Power BI Desktop safely and connect data sources
- model, calculate and analyze data with DAX
- present complex information visually and comprehensibly
- design interactive dashboards for dynamic analyses
- publish reports via Power BI Online and share them with the team

Content

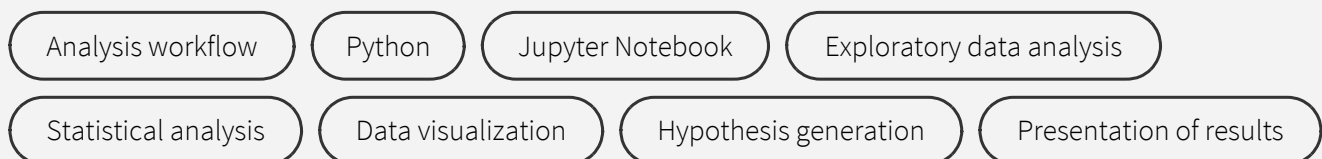
- Introduction: Power BI
- First steps with Power BI Desktop
- Creating data sources in Power BI
- Creating visualizations
- Aggregations, calculations and parameters
- Calculations with DAX expressions
- Interactive dashboards
- Sharing reports with Power BI Online

Module 8

Capstone Project - Data Analysis Project from A-Z

In this module, you will apply your knowledge from all previous course modules in an independent analysis project. Working with either a given or a self-selected data set, you will tackle a data-based question – from data preparation and exploratory analysis to the presentation of your results. Your project will be documented in a Jupyter notebook and will also form the first building block of your professional analyst portfolio.

Core Skills



Learning Outcomes

You will learn to:

- plan and carry out a data analysis project independently
- prepare, analyze and visualize real data sets
- derive relevant questions and answer them based on data
- use various data analysis tools and techniques in combination (e.g. Python, pandas, Matplotlib, Seaborn)

- document analysis results comprehensibly and present them convincingly

Content

Implementation of an independent data analysis project – starting with data selection, EDA and evaluation through to the presentation of results in the Jupyter Notebook.

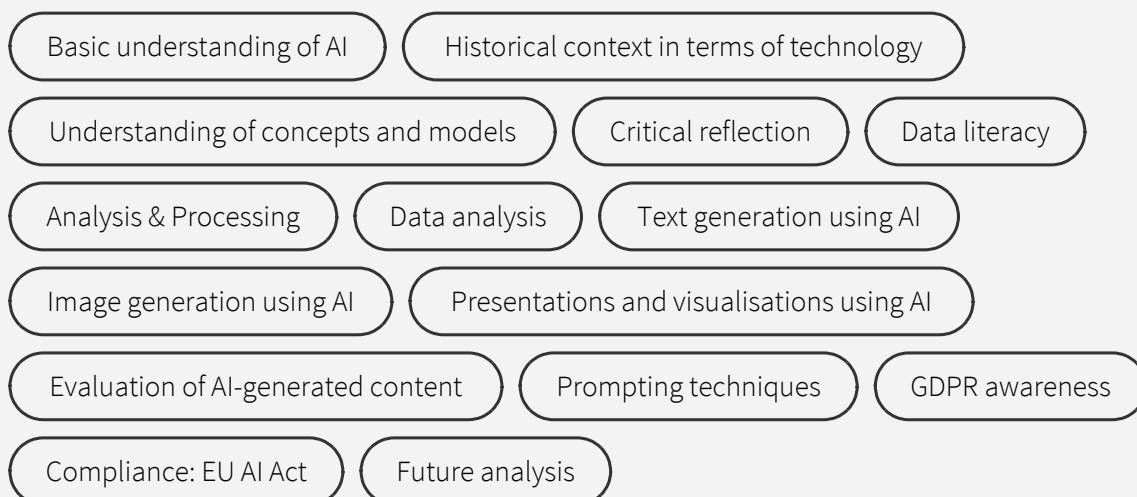
Module 9

Bonus: AI Training

Artificial intelligence is now part of everyday working life in many professions. To ensure you are fully prepared for the demands of the modern workplace, you will receive a free AI training course that teaches you the key fundamentals and practical applications of AI.

This AI training course provides you with a solid introduction to the world of artificial intelligence. In this course, you will learn the key terms in AI, understand how language models (Large Language Models, LLMs) work, and prepare data in a targeted manner. You'll also use practical AI tools for text, images and presentations, develop your own prompts and create AI workflows. Furthermore, you'll gain an overview of the legal framework – including the GDPR, the EU AI Act and compliance – as well as the future of working with artificial intelligence. This will enable you to use AI in your day-to-day work confidently, efficiently and in full compliance with the regulations.

Core Skills



Learning Outcomes

You will learn:

- to confidently identify and explain the key AI terminology

- to understand how AI makes decisions, why models sometimes ‘hallucinate’ and what you should look out for
- to recognise common AI applications in everyday life and assess how they can be useful in your profession
- to identify key data quality criteria and understand their relevance for AI systems
- to independently clean and structure simple datasets and make them usable for AI applications
- to critically reflect on the impact of data quality and presentation on efficiency, decision-making and automation
- to apply practical AI tools in the areas of text, images and presentations
- to generate texts, images and presentations quickly and evaluate the results using simple quality criteria
- to understand how language models work and the effect of different prompting techniques
- Develop, test and optimise prompts in a targeted manner
- Design their own AI assistants and automated workflows using prompt engineering
- Confidently navigate the key legal frameworks governing the use of AI (GDPR, EU AI Act, copyright and liability)
- Understand the implications of these regulations for businesses and AI projects
- Realistically assess the opportunities and risks of artificial intelligence in everyday working life
- Understand the changes brought about by AI in work processes, job profiles and skill requirements

Content

- What is Artificial Intelligence (AI)?
- From science fiction to everyday life – The history of AI
- Understanding key AI concepts
- Language models – How LLMs work
- Understanding data as the foundation of AI
- Data quality as a key factor in the success of AI systems
- Preparing data for AI applications
- Text AI basics – Writing, analysing, summarising
- Image AI Basics – From idea to illustration
- Presentation AI Basics – Designing slides and narratives with AI
- Fundamentals of Prompting – Structure and organisation
- Data protection, copyright and liability in the context of AI
- The EU AI Act – Rules, obligations and implications
- Societal impacts of AI and the future of work with AI

Human-centered learning

in an online learning environment

Online, but not alone. Our proven, human-centered approach guarantees you ongoing support and a dedicated team to guide you every step of the way.



Ausgezeichnete Lern- erfolge

Wir lassen dich nicht alleine!

Unser erprobter, menschenzentrierter Ansatz bietet dir stets die Unterstützung, die du brauchst und ein motiviertes Team, das dich auf deinem Weg begleitet.



Tägliche Live Trainings

Starte neu und lerne von erfahrenen Branchenexperten mit viel Praxis, um dich optimal auf deine berufliche Zukunft vorzubereiten.



Karrierecoaches begleiten dich

Unsere Karriere-Coaches begleiten dich von Tag 1 an und bereiten dich optimal auf eine erfolgreiche Karriere vor.



Studienberater an deiner Seite

Unsere Studienberater stehen dir bei allen Fragen zur Seite und meistern mit dir jede Herausforderung, die sich dir in den Weg stellt.



Deine kollaborative Gemeinschaft

Lernen geht am besten mit anderen. Da Lernen kein Alleingang ist, erhältst du einen exklusiven Zugang zu unserer Community.

Career services

for you and your future

With our career services, we guide you through the entire professional development, from onboarding to successful completion and beyond. We support you from your first career goal to signing your contract with personalized coaching, practical support, and smart tools. We ensure that you're ready for the job market and connect you with interesting employers.



Academic advising

Our academic advisors are here to offer you guidance and support, and will help you overcome any challenges that come your way.



Job application training

You'll benefit from free job application training tailored to the needs of employers.



Career advice sessions

We offer free career counseling sessions with experienced HR managers to provide you with personalized advice.



Career coaching

Our career coaches will support you from the very start of the course and provide you with the best possible preparation for your professional career.

Funding & financing

There are many ways for you to take advantage of our subsidized training programs. Below, we have compiled all the relevant information about the available funding options that you can use to participate in our training programs.



Bildungsgutschein

00,00€

100% funding with an AZA-V-certified education voucher



Self-payers

One-time payment

7.500 €



Monthly payment

One-time payment before the course starts

3.150 €

Monthly payment

2.200 €

Bildungsgutschein

100% funded professional development

Take advantage of training or retraining funded through a Bildungsgutschein from the Agentur für Arbeit! You get the chance to gain specific skills and seize new career opportunities. All further training costs are covered by the Agentur für Arbeit or the Jobcenter.

A Bildungsgutschein allows you to participate in training programs free of charge. These are financed by the Agentur für Arbeit or the Jobcenter to support residents in Germany to upskill and improve their professional qualifications.

Maßnahmenummer

Full-time: 955/249/2026

Part-time: 955/342/2026

Here's how to get your Bildungsgutschein

1 Consultation

Make an appointment at your local Agentur für Arbeit.

2 Bootcamp

Choose an XDi course of your choice.

3 Course offer

Request a quote for the course of your choice.

4 Application

Submit an application and your course offering.

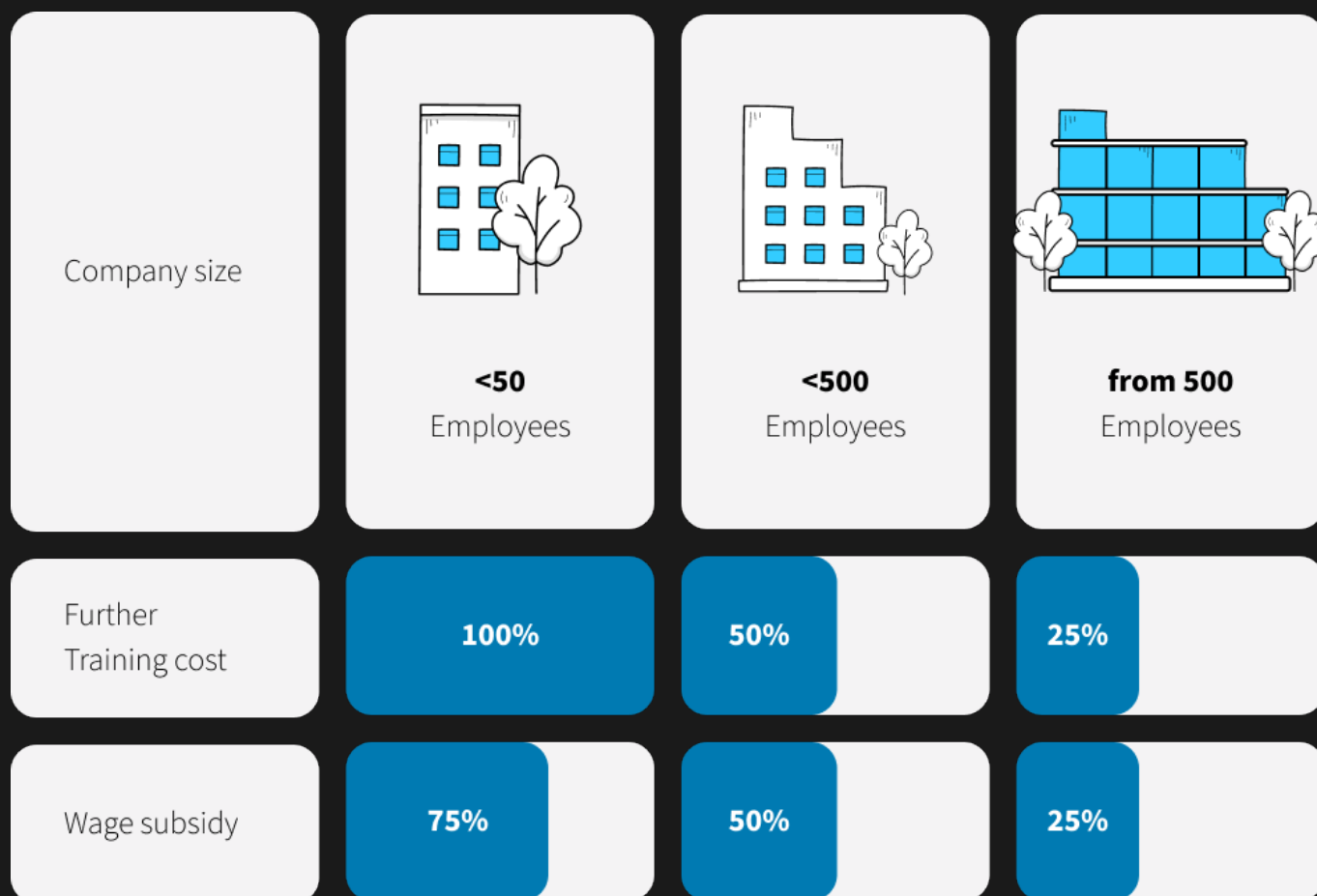
5 Registration

Register and submit the education voucher.

Qualifizierungschancengesetz

For job seekers and employees

At a time when technologies are constantly evolving, and the world of work is transforming, companies need to invest in professional development and upskilling of their employees. This ensures they are prepared for the challenges of the future and enables organizations to successfully navigate the digital transformation.



Benefit from XDi

XDi focuses on new, interactive teaching and learning formats based on the latest findings in brain research. Our motto is “learning by doing”; participants in our training programs learn to apply relevant methods and techniques through practical exercises in realistic projects, with the support of a personal mentor.



Officially recognized certificate

Upon completion of the training program, you will receive the „Data Analyst“ certificate from the XDi – Experience Design Institute. The certificate is recognized by German UPA, the Interaction Design Foundation, and UXPA, and has earned an international reputation.



Top salary & career opportunities

More jobs require more knowledge. Many of our students achieved positive results after attending our seminars.



Data Analyst

analyses data and creates reports for data-driven decisions

Up to **56.500€**

Data Scientist

develops models, evaluates big data and delivers forecasts

Up to **64.000€**

Data Engineer

builds and maintains data infrastructure for analytics and applications

Up to **65.800€**

Business Analyst

analyses business processes and supports optimisations

Up to **63.000€**

Machine Learning Engineer

develops and implements machine learning models and algorithms

Up to **66.000€**

See for yourself!

Show more →



Andreas Manietta

The training "[Certified Data Analyst](#)" was a crucial success factor - I raised my knowledge to a new level in a very short time. The dynamic and focused pace was just right to keep me fully challenged and consistently engaged with the topics. The practice-oriented strategies were particularly valuable, delivering results that could be implemented immediately. The well thought-out questions and ground-breaking impulses not only broadened my thinking, but also highlighted clear areas of action for future success. For me, further training is not a question of if - but when, in order to continue to grow strategically.



Daniel Naesa

Participating in the "[Certified Data Scientist](#)" course was a groundbreaking decision for me. The richness of practical knowledge exceeded my expectations and gave me a deeper understanding of complex data analysis. The challenges in the course not only strengthened my skills but also pushed my motivation to excel. The support from XDi was excellent and I feel well equipped to take on challenging projects in data science. I highly recommend this course to anyone who wants to take their career in this field to the next level!



5/5

Google



4,5/5

Trustpilot



4,9/5

Kursfinder



4,7/5

Career
Karma



4,9/5

Course
Report



4,7/5

SwitchUp

Our references

These companies are training their workforce with us and recruiting our students.

See all our references →

adidas

Allianz 

amazon 

 **AT&T**



 **Bayer**

 **BOSCH**

DAIMLER

Deloitte.

 **BAHN**

Deutsche Bank 

Dr. Becker  Klinikgruppe

Dräger

e-on

fielmann



BOSS
HUGO BOSS

ING 

 Mercedes-Benz

SUPER 

 **Telefónica**

Certified and accredited

Government-approved and **100% eligible** for funding. Get some advice on how to get everything you need for the Federal Employment Agency.



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2026

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**Learn today
for the world of tomorrow**

Contact

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🕒 Mo. - Fr. 08:00 - 17:00 Uhr

🌐 xd-i.com