TECHNICAL LEARNING AND ASSESSMENT DOSSIER

Data Science & Big Data – Exam

Price / certificate issuance
150,00 €
VAT excluded

Course code	Minimum duration	Final pass score	Dossier issue
DSBD_LA	60 min	70%	28/11/2026

1. Course identity, purpose and scope

The "Data Science & Big Data – Exam" course is designed to provide in-depth and practical training in analyzing large-scale data using advanced tools. The program covers programming languages such as Python and SQL, essential for data manipulation and analysis. Participants will gain skills in data cleaning, preparation, and exploratory data analysis (EDA), alongside foundational statistics and data visualization techniques to aid result interpretation. The course also introduces key Big Data ecosystem tools, including Spark and Hadoop, and essential concepts related to data warehouses and data lakes. Emphasis is placed on data governance and quality, critical for ensuring reliability and compliance in analyses. The curriculum culminates in an exam featuring complex practical cases like clickstream analysis, multi-source data normalization, data drift management, and quality monitoring, with a focus on current topics such as privacy by design, MLOps, and streaming data handling. This training is aimed at professionals and aspiring data scientists seeking to strengthen their technical and operational competencies in the Big Data field.

This extended technical dossier describes the pathway as published in CIWZ Academy on the issue date. It consolidates purpose, references, learning architecture, module contents, assessment system, passing criteria and certificate conditions. It does not replace the official texts of the standards, laws, guidelines or schemes referenced.

2. Normative, regulatory and technical references

Large-scale data analysis (Big Data) + learning paths on Python and SQL + data cleaning and preparation + exploratory data analysis (EDA) + basic statistics + data visualization + overview of Big Data tools (e.g., Spark/Hadoop) and data warehouse/lake + data governance/quality

References are used as the learning and assessment framework within the limits of published content and available sources. For professional application, the official and current versions of the referenced documents always prevail.

3. Learning architecture and assessment system

- minimum tracked time: 60 min
- active final-exam bank: 200 questions
- final exam: 30 questions selected from the bank
- passing threshold: 70%

- Direct access to the final assessment under the published rules for the exam-only pathway.
- Exam assembly from the active course bank and scoring against the published pass threshold.
- Recording of the result and, where applicable, request for the final certificate.

4. Official catalogue technical information

Learning Objectives

- Provide advanced skills in data science and big data analytics.
- Develop practical abilities in Python and SQL.
- Learn data cleaning, EDA, and visualization methods.
- Understand Big Data tools such as Spark and Hadoop.
- Deepen knowledge of data governance and quality.

Skills Acquired

- Manipulating and analyzing large datasets.
- Data preparation and cleaning.
- Applying basic statistical techniques.
- Using data warehouses and data lakes.
- Monitoring data quality and management.

Target Audience

- IT professionals.
- Data analysts and aspiring data scientists.
- Experts interested in applied Big Data.

Prerequisites

- Basic programming knowledge.
- Familiarity with database concepts.

Program

- Python and SQL for Big Data.
- Data cleaning and preparation.
- Exploratory Data Analysis (EDA).
- Basic statistics.

- Data visualization.
- Big Data tools: Spark, Hadoop.
- Data warehouses and data lakes.
- Data governance and quality.

Teaching Methodology

- Theoretical lessons.
- Practical exercises.
- Case studies and examinations.

Assessment Method

- Final written exam with practical cases.
- Passing score of at least 70%.

Duration

- 60-minute final exam.

Certification

- Completion certificate (fee applies).

Expected Outcomes

- Ability to handle Big Data projects.
- Strong technical and operational preparation for complex analyses.

7. Assessment system, final exam and passing criteria

- The final assessment consists of 30 questions selected from the active course bank. The platform applies an anti-repetition logic for new attempts when the bank size allows it.
- Final question-bank size detected at generation time: 200 active questions.
- Published passing threshold for the course: 70%.
- Questions are intended to assess not only recall but also interpretation, application, evidence selection, scenario assessment and quality of decision-making, depending on the subject matter.

8. Tracking, learning continuity and session integrity

- Path status, completed modules and recorded time are managed server-side when the course uses the Academy learning mode.
- The platform allows the pathway to resume from the recorded point and retains the results of required checks.
- Assessment sessions may be subject to the integrity and proctoring controls enabled by the platform and described in the applicable usage rules.
- Technical and integrity events support assessment and do not replace professional judgement where human review is required.

9. Certificate, use and limitations

The CIWZ certificate, where provided by the pathway and requested after passing, records the result achieved in the stated CIWZ pathway or assessment. It does not automatically replace personnel certification, professional registration, statutory licence, legal qualification or credentials issued by third-party bodies where such requirements are imposed by the applicable scheme.

10. Commercial and tax conditions

- Price / certificate issuance: 150,00 € VAT excluded.
- UAE VAT is applied to UAE customers according to billing data and the applicable tax rules.
- Any specific commercial terms, agreements or corporate orders override the public price only when formally accepted by Certificato IWZ FZCO.

11. Dossier document control

- Document automatically generated by CIWZ Academy from the course data published at the time of the request.
- Course code: DSBD_LA
- Document language: EN

- Generation date: 28/11/2026
- For normative and professional application, the current official sources and any applicable procedures/schemes prevail.