ENTERPRISE BIG DATA FRAMEWORK

ENTERPRISE BIG DATA ENGINEER

5-day course

CORE TECHNIQUES FOR EFFICIENT DATA ENGINEERING

In an era of rapid data growth, mastering the development of high-performance data pipelines is key to unlocking business value. The Enterprise Big Data Engineer (EBDE®) Certification, part of the DASCIN® Enterprise Big Data Framework, equips professionals with the expertise to design, implement, and optimize high-performance data pipelines and architectures.

This globally recognized credential covers advanced concepts in data engineering, including real-time and batch processing, distributed computing, data pipeline automation, and security—ensuring professionals can develop efficient, resilient, and future-ready Big Data solutions. Designed for data engineers, architects, and IT leaders, the EBDE® Certification validates your ability to construct and manage complex data pipelines that drive business insights and operational efficiency. Whether you're optimizing existing data workflows or developing end-to-end data pipelines for next-generation analytics, this certification empowers you to master the technical foundations of Big Data engineering and stay ahead in an evolving digital economy. While prior certification in foundational levels of the DASCIN Enterprise Big Data Framework is not mandatory, it is strongly recommended as preparation for this advanced program.

SYLLABUS SCOPE

The EBDE certification covers the core topics essential for modern Big Data engineering. Candidates will learn to design structured and unstructured data systems, implement ETL, batch, and stream processing, and build scalable pipelines that support analytics and business intelligence. The program also explores data architectures, machine learning applications, and key security and privacy considerations. Participants gain hands-on exposure to distributed systems, real-time processing, and advanced architectures using tools such as Hadoop, Spark, Kafka, and Flink. By mastering these skills, professionals will be able to design, integrate, and secure efficient Big Data solutions that drive innovation and align with enterprise goals and best practices.

EXAM DETAILS

PASSING MARK
52 OUT OF 80

FORMAT
MULTIPLE CHOICE

DURATION
2 HOURS

MATERIALS
CLOSED BOOK



FORMAT

Instructor-Led Training (Live or Virtual) | Self-Paced Online Training

KEY FEATURES

- **Comprehensive Curriculum** – Covers essential Big Data engineering techniques, data governance, security, and automation.
- **Practical Learning Approach** – Engages candidates with real-world case studies and interactive exercises.
- **Accreditation** – Accredited by APMG International, ensuring global recognition.
- **Lifetime Certification** – No renewal required.
- **Industry-Relevant Content** – Aligns with current business and technological trends.
- **Vendor-Neutral Certification** – Focuses on universal data engineering principles.
- **Continuous Education Path** – Provides a pathway for Enterprise Big Data Architect (EBDAR) certification and other advanced certifications within the DASCIN® Enterprise Big Data Framework.

DASCIN®



+25%

Demand for Big Data Engineers is expected to grow 25% from 2023 to 2032, driven by the rise of data-driven decision-making and scalable architectures.

- The U.S. Bureau of Labor Statistics

JOB DEMAND

The demand for Big Data Engineers continues to rise across industries. Key insights from industry reports highlight the growing need for these skills:

- **Gartner (2024)**: By 2027, 80% of organizations will require advanced data engineering skills.
- **World Economic Forum's Future of Jobs Report (2025)**: Data-related roles will experience significant growth, with 50% of companies prioritizing data engineering training.
- **LinkedIn Global Skills Report (2024)**: Data engineering ranks among the top five in-demand business skills, with job postings increasing by over 30% year-over-year.
- **The U.S. Bureau of Labor Statistics**: Projects a 25% increase in employment for data engineers from 2023 to 2032, significantly higher than the average for other professions.

TARGET AUDIENCE

The EBDE certification is ideal for professionals seeking to enhance their expertise in designing, managing, and optimizing large-scale data systems within enterprise environments. The target audience includes:

- **Data Engineers** – Specialists in designing, constructing, and maintaining scalable data pipelines.
- **Data Architects** – Experts in creating and implementing complex data frameworks aligned with business needs.
- **ETL Developers** – Professionals focusing on data extraction, transformation, and loading for integration.
- **Database Administrators** – Managers of structured and unstructured data storage systems.
- **Data Scientists** – Analysts seeking proficiency in data engineering to streamline analytics workflows.
- **IT Infrastructure Specialists** – Overseeing distributed data systems and cloud-based platforms.
- **Software Developers** – Focused on data processing, real-time streaming, and machine learning integration.
- **Enterprise Technology Leaders** – Implementing scalable and efficient data engineering strategies.
- **Compliance and Security Officers** – Ensuring enterprise-wide data security, privacy, and regulatory adherence.
- **Software Engineers, IT Professionals, and System Analysts** – Transitioning into data engineering roles or expanding their technical competencies.

FREQUENTLY ASKED QUESTIONS

Q: Do I need prior experience in data engineering to take this course?

A: No prior experience is required, but familiarity with data processing concepts and basic programming knowledge can be beneficial. While the EBDP® certification is not mandatory, it is recommended as a foundation.

Q: How does this certification differ from other data engineering programs?

A: The EBDE® certification focuses on enterprise-scale Big Data engineering, covering data architecture, pipelines, ETL, and security while remaining vendor-neutral. It is designed for practical, real-world applications rather than focusing on a single technology or platform.

Q: What skills will I gain from this course?

A: Participants will develop expertise in designing scalable data architectures, implementing ETL and data pipelines, managing distributed systems, and processing real-time data. The course provides hands-on experience with key Big Data technologies such as Hadoop, Spark, Kafka, and Flink.

Q: What career opportunities does this certification open up?

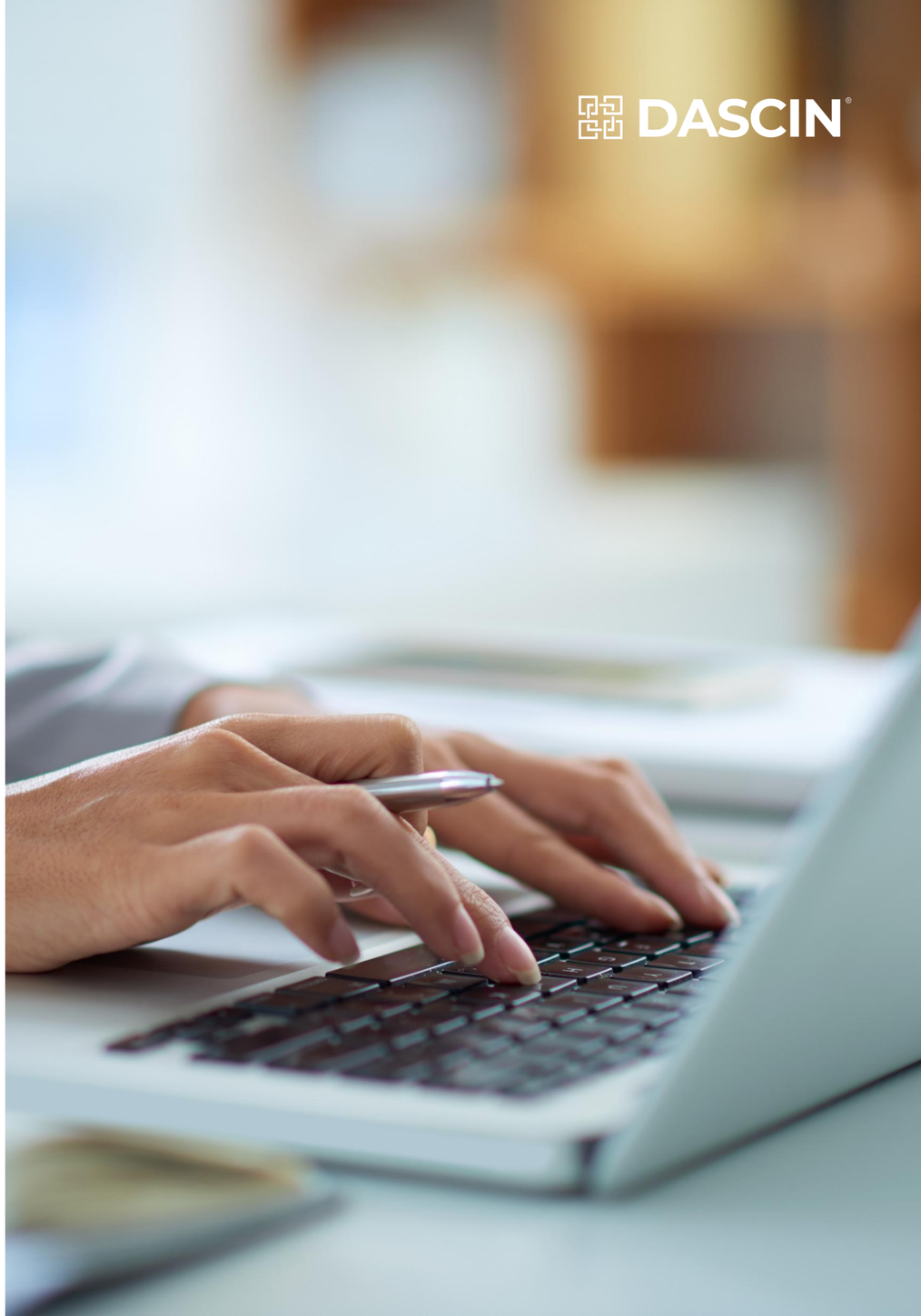
A: EBDE® certification is ideal for professionals pursuing roles such as Data Engineer, Data Architect, ETL Developer, Database Administrator, and Big Data Specialist. These roles are in high demand across industries, including finance, healthcare, retail, and technology.

Q: Is programming required for this certification?

A: While programming experience is not mandatory, candidates will need to interpret technical concepts and work with SQL and scripting for data processing. The course emphasizes understanding and managing data engineering workflows rather than coding from scratch.

Q: What are the next steps after earning the EBDE® certification?

A: After completing EBDE®, candidates can explore specialized certifications within the DASCIN® Enterprise Big Data Framework, such as the Enterprise Big Data Architect (EBDAR®).



TARGET INDUSTRY

- **Finance & Banking** – Financial institutions rely on Big Data to detect fraud, assess credit risk, and optimize trading strategies. EBDE-certified professionals can design scalable data pipelines for real-time transaction monitoring, predictive analytics, and regulatory compliance.
- **Healthcare & Life Sciences** – Big Data engineering is crucial in processing electronic health records, medical imaging, and genomic data. EBDE-certified engineers help develop secure and efficient data architectures for AI-driven diagnostics, personalized medicine, and patient care analytics.
- **Retail & E-commerce** – Businesses use Big Data for demand forecasting, customer personalization, and inventory optimization. EBDE professionals enable companies to build real-time recommendation engines, track consumer behaviour, and enhance supply chain efficiency.
- **Technology & Telecommunications** – Telecom providers and tech companies handle massive volumes of real-time data from networks, IoT devices, and user interactions. EBDE certification equips professionals with the skills to design robust data infrastructures that support real-time analytics, network optimization, and cybersecurity.
- **Enterprise Manufacturing Analytics** – Harnessing Big Data for process optimization, EBDE-certified professionals integrate sensor networks, machine learning models, and real-time analytics to enhance quality control and production efficiency.

CONCLUSION

The Enterprise Big Data Engineer (EBDE®) Certification is more than an advanced qualification—it is a strategic investment in your career and your organization's data-driven future. By mastering scalable architectures, automated pipelines, real-time processing, and enterprise-grade security, you'll gain the expertise to turn complex data challenges into business value. As industries increasingly rely on high-quality data, EBDE-certified professionals stand out as trusted experts who design and safeguard the infrastructures powering modern enterprises. This certification validates your technical competence and positions you as a leader who bridges the gap between raw data and strategic insight. Whether you're accelerating your career, transitioning into Big Data roles, or strengthening your organization's competitiveness, EBDE® provides the skills, recognition, and confidence to build resilient, future-ready data ecosystems.



CONTACT & MORE INFORMATION

Web: www.dascin.org
Email: info@dascin.org