# 5-day course

# ENTERPRISE BIG DATA SCIENTIST

### **ADVANCED STRATEGIES FOR DATA SCIENCE MASTERY**

Data science is transforming industries, making skilled professionals invaluable in solving complex business challenges. As the demand for data scientists continues to rise, gaining expertise in data science and machine learning is more valuable than ever. The Enterprise Big Data Scientist (EBDS®) Certification, part of the globally recognized DASCIN® Enterprise Big Data Framework, empowers professionals with the skills needed to analyse large-scale data, build predictive models, and apply advanced machine learning techniques to solve complex business challenges.

This certification blends theory with hands-on learning, covering statistical modelling, supervised and unsupervised learning, deep learning, and enterprise-scale data solutions. With practical experience in Python—alongside brief use of R and SQL—candidates gain the expertise needed to implement data-driven strategies and tackle real-world analytics problems. As an advanced qualification within the Big Data Framework, the EBDS® Certification builds on the foundational knowledge of earlier levels, equipping professionals with the technical and analytical skills required for Big Data analytics and algorithm development. While prior certification is not mandatory, completing the foundational levels of the DASCIN Enterprise Big Data Framework is strongly recommended for a seamless learning experience.

# **SYLLABUS SCOPE**

The EBDS® Certification Program dives into enterprise-level data science, equipping professionals with skills in statistical modelling, machine learning, and big data technologies. Candidates will master supervised and unsupervised learning, deep learning, and ensemble methods to build predictive models, while refining expertise in analysis, evaluation, and optimization for data-driven decisions. The course emphasizes practical visualization and communication with Python, R, Power BI, and Tableau. Participants will also explore distributed systems, frameworks like Apache Spark, and cloud strategies for managing large-scale data. Ethical practices—covering privacy, bias, and accountability—ensure responsible application in business environments.

# **EXAM DETAILS**

PASSING MARK

**FORMAT** 

52 OUT OF 80

MULTIPLE CHOICE

**DURATION** 

**MATERIALS** 

**2.5 HOURS** 

**OPEN BOOK** 



# **FORMAT**

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

## **KEY FEATURES**

- Comprehensive Curriculum –Covers a wide range of topics including statistical modelling, machine learning algorithms, data visualization techniques, and applied data science methodologies. Participants gain a thorough understanding of the entire data science workflow, from data preprocessing to model evaluation.
- Practical Learning Approach Includes 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 The EBDS certification is vendor-neutral, providing unbiased insights into various Big Data technologies, algorithms, and processes.
- Continuous Education Path Provides a pathway for advanced certifications within the DASCIN® Enterprise Big Data Framework.





# **JOB DEMAND**

The demand for data scientists continues to surge globally, driven by the increasing reliance on datadriven decision-making across various industries.

- **Gartner (2024):** By 2027, 80% of organizations will require advanced data science and machine learning skills.
- World Economic Forum's Future of Jobs Report (2025): Data-related roles will experience significant growth, with 50% of companies prioritizing data science training.
- LinkedIn Global Skills Report (2024): Data science and machine learning rank among the top five indemand 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 scientists from 2022 to 2032, significantly higher than the average for other professions. By 2026, 11.5 million new jobs will be available for data science professionals

# **TARGET AUDIENCE**

The EBDS qualification is ideal for professionals seeking to deepen their expertise in enterprise-level data science and big data analytics. The target audience includes:

- **Data Scientists** Professionals looking to expand their knowledge of advanced concepts and techniques for enterprise data analysis and decision-making.
- **Big Data Analysts** Individuals analysing large volumes of data who seek to enhance their skills to tackle complex data challenges more effectively.
- **Machine Learning Engineers** Developers specializing in machine learning applications who want to refine their proficiency in utilizing algorithms and methodologies for enterprise solutions.
- **Data Engineers** Experts involved in designing and maintaining data pipelines, seeking to enhance their understanding of data science principles to improve data processing and analytics capabilities.
- IT Professionals Those working in enterprise IT roles who want to understand how big data technologies and data science methodologies can optimize business processes and drive innovation.

# **FREQUENTLY ASKED QUESTIONS**

#### Q: How does EBDS address the diverse needs and backgrounds of participants?

**A:** The EBDS course offers a comprehensive curriculum that covers a wide range of topics, including statistical modelling, machine learning algorithms, data visualization techniques, and applied data science methodologies. This allows participants from diverse backgrounds and roles, such as data analysts, business analysts, and data scientists, to find relevance and value in the course content. Additionally, the hands-on learning approach enables participants to apply the concepts learned to real-world scenarios, regardless of their prior experience or background.

# Q: What distinguishes the EBDS Certification from the Microsoft Certified: Azure Data Scientist Associate certification?

**A:** The EBDS Certification provides a vendor-neutral approach, covering a broad spectrum of statistical and computational techniques, while the Azure Data Scientist Associate certification focuses specifically on data science skills within the Microsoft Azure ecosystem.

# Q: Is the EBDS Certification globally recognized?

**A:** Yes, the EBDS Certification is accredited by APMG International and is recognized worldwide, providing legitimacy and credibility to professionals across different industries.

## Q: Does the EBDS Certification require renewal?

**A:** No, the EBDS Certification offers lifetime validity, eliminating the need for periodic renewal and allowing professionals to showcase their expertise indefinitely.

# Q: Do I need prior experience in data science 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.





# **TARGET INDUSTRY**

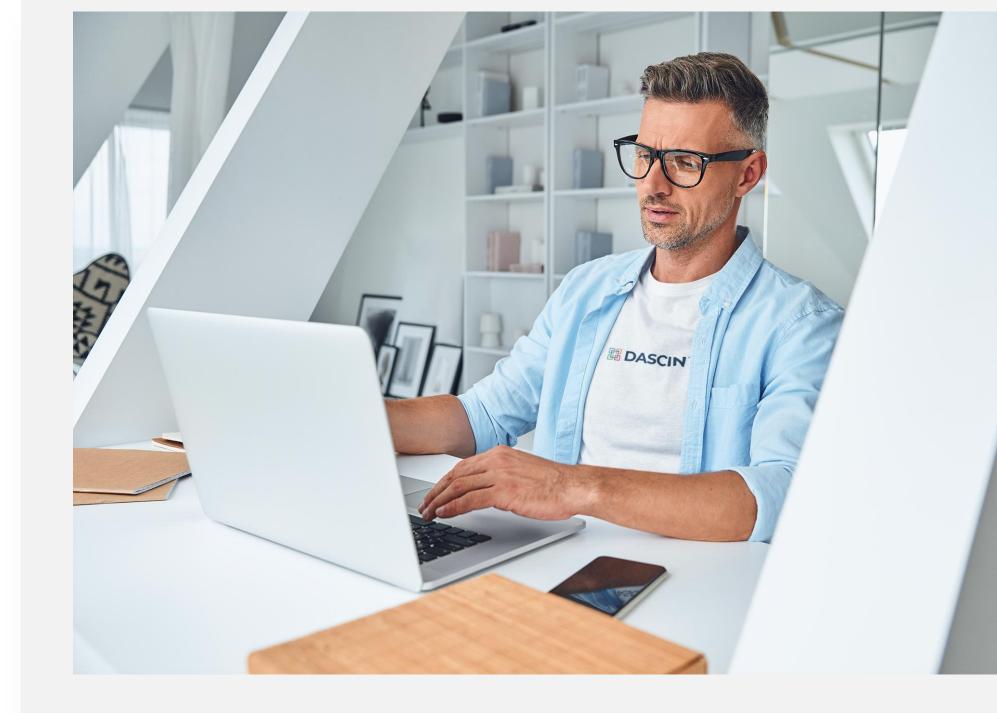
- **Finance & Banking** Fraud detection, risk modelling, and algorithmic trading rely heavily on advanced data science for real-time decision-making.
- **Healthcare & Pharmaceuticals** Predictive analytics, patient diagnostics, and drug discovery require sophisticated machine learning and big data expertise.
- **Retail & E-Commerce** Customer behaviour analysis, recommendation systems, and supply chain optimization depend on data-driven insights.
- **Technology & Software Development** Al applications, cybersecurity analytics, and cloud-based platforms leverage data science to drive continuous innovation and efficiency.
- **Manufacturing & Supply Chain** Predictive maintenance, demand forecasting, and operational efficiency are enhanced by big data analytics.
- **Energy & Utilities** Data science supports smart grid optimization, predictive maintenance of infrastructure, and renewable energy forecasting.
- **Telecommunications** With massive volumes of real-time network and customer data, telecom providers leverage machine learning for customer churn prediction, network optimization, and fraud detection.
- **Government & Public Sector** Governments increasingly rely on big data for smart city development, public health analytics, fraud detection, and policy planning.

# **CONCLUSION**

The Enterprise Big Data Scientist (EBDS®) Certification is more than a credential—it is a career accelerator in one of today's most impactful fields. By mastering advanced data science, machine learning, and large-scale analytics, you will gain the ability to turn raw data into meaningful insights that drive business strategy and innovation.

Covering predictive modelling, deep learning, data visualization, and ethical AI, the EBDS® program equips you with both technical expertise and the ability to solve real-world challenges at enterprise scale. Certified professionals stand out as trusted experts who bridge technical mastery with business value—making them highly sought after across industries.

Whether you aim to step into a leadership role, elevate your analytics career, or transition into AI and machine learning, the EBDS® Certification provides a globally recognized pathway to success while positioning you to shape a smarter, data-driven future.



# CONTACT & MORE INFORMATION

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