



**Industry's Most Reliable Certification
to Excel in Data Engineering Career**

Become a Certified

**SENIOR
BIG DATA ENGINEER (SBDE™)**

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Big Data Engineering and Development is one of the most in-demand Big Data career domains today.

SBDE™ is cut out for formally trained and experienced software and computing professionals intending to deepen, enrich and professionally demonstrate their capabilities in bleeding-edge data science. The most widely respected credential for senior professionals in big data engineering worldwide today, SBDE™ acts as a reliable differentiator of your high proficiency, potential, and promise for working on the most challenging Big Data software and applications development projects globally.

If you are a data professional wanting to become a data engineering specialist the industry looks for, then investing in a data engineer certification would be the best bet for you!

BUILD YOUR
DATA ENGINEER CAREER
WITH DASCA'S
BIG DATA ENGINEERING
CERTIFICATION



Why SBDE™

DASCA's Big Data Engineer Certifications are major international qualifications today for software engineers and programmers aspiring to enter or grow in the high-demand Big Data development and engineering profession.

If you are an ambitious software engineer or programming professional, the Senior Big Data Engineer Credential from DASCA differentiates you strongly from your peers and sets you up for a successful career in the Big Data Engineering space.

DASCA-certified professionals can work across all popular, advanced, old, or new data engineering, and big data application development platforms, technologies, tools, use-cases, and user industries. DASCA credentials are incomparably valuable for job seekers as, unlike the narrowly focused platform-specific coverage of other certifications, DASCA credentials are based on a vendor-neutral body of knowledge.

Most of the Data Science certifications available today are offered by technology creators themselves, with narrow applicability to ONLY the niche, specific technologies, platforms and products they develop. This is what sets DASCA apart.

WHAT IS THE WORLD SAYING ABOUT DASCA?



DASCA is the prime sponsor of WDSI



The Data Science Degree Programs Guide uses DASCA recognition as a benchmark for its selection of the top data science certificate programs.



Hackr.io named vendor-neutral certifications offered by DASCA among the Top 8 Global Data Science Certification Programs



DASCA Certifications validate and test credential-holders in over 30 profession-critical knowledge vectors



Intellipaat dubbed DASCA Certifications among the Top 10 Big Data Certifications recognized in the world



DASCA certifications were listed in "Top 18 Data Science Certifications" for career advancement by Indeed.com



The CIO Magazine reported the Data Science certifications offered by DASCA among the World's Top 5 Must-Have Global Credentials for top-end careers in Big Data Engineer, engineering, application development, and Data Science leadership



DATA SCIENCE UBIQUITY

Business leaders say that the biggest benefit of using data engineering techniques is competitive advantage.

Data engineers are vital members of any enterprise data analytics team, responsible for managing, optimizing, monitoring data retrieval, storage and distribution throughout the organization.

**TODAY,
73%**
of companies are investing in Data Operations.

According to a research survey, the use of data engineering leads to:



Improved efficiency and productivity



Faster, more effective decision-making



Better financial performance

Now is the time for you to strike! Join the team of elite data engineers.

The U.S. Bureau of Labor Statistics (BLS) anticipates that data-related jobs will grow by 28 percent, by 2026, leading to **11.5 million** jobs.

To drive the data-driven decision making culture and improve competitiveness, top organizations hunt for certified data engineers.

Get certified with
DASCA's Big Data Engineering Certification!

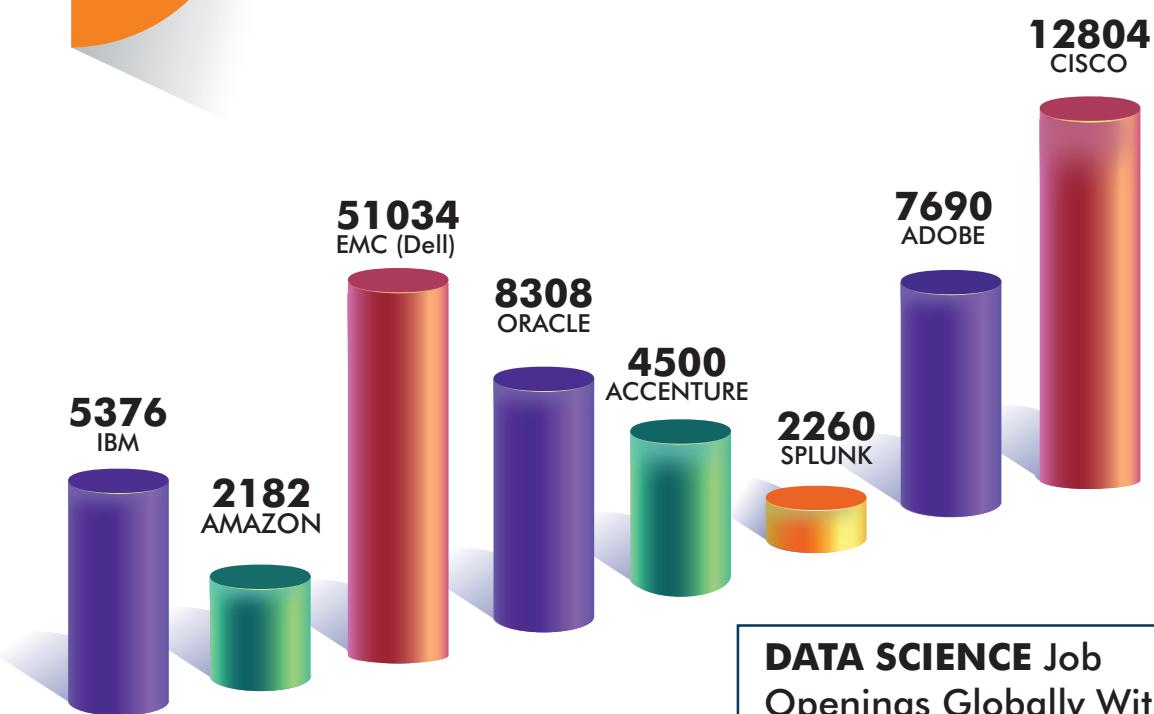
RISE IN DEMAND

Data Science has become the fuel of all modern technologies, driving professionals, machines, and success of organizations around the world. The demand for Data Scientists, Big Data Engineers, and Big Data Engineers is at a level unseen before.

According to Indeed,
the estimated base salary
for a Data Engineer is
\$117,135 per year.

50%

DICE's 2020 Tech Job Report highlighted 'data engineer' as the fastest-growing tech occupation, with a 50% year-on-year growth in job postings.

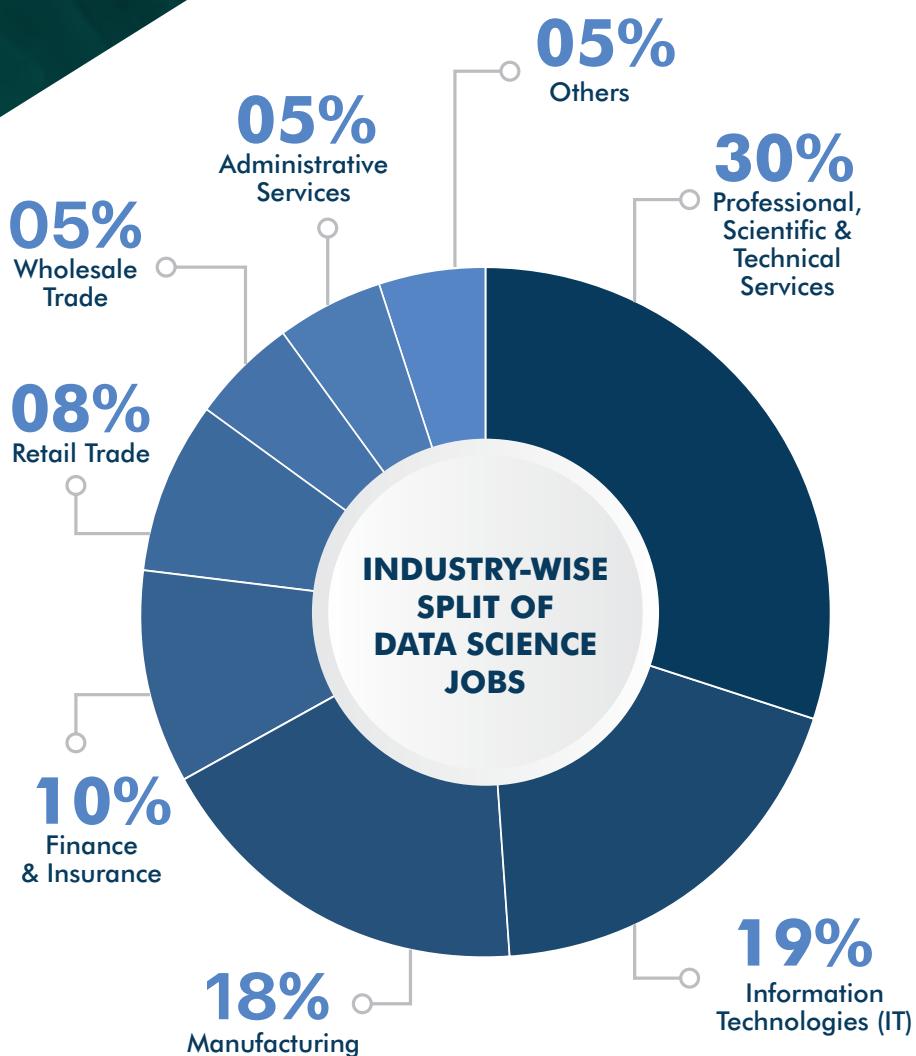


DATA SCIENCE Job
Openings Globally With
TOP EMPLOYERS

Source: Edvantic Analysis of various international studies on demand for data science professionals globally

DATA SCIENCE JOBS

Data Science opportunities multiply as all business functions, industries, and sectors use more Data Science tools and software. Trained and certified professionals are required in large numbers to operate them effectively.



Source: Edvantic Analysis of various international studies on demand for data science professionals globally



Who could be a **SENIOR BIG DATA ENGINEER?**

The SBDE™ can prove to be a career-changing qualification for you if you have completed your undergraduate degree in Information Technology/ Software Engineering/ Computer Science from a nationally or an internationally accredited institution, and are now handling senior-level responsibilities related to engineering, development, testing, commissioning or maintenance of software/ systems/ applications or platforms.

SBDE™ is an ideal qualification for you, if you are already into data analytics or data engineering.

**Data Engineering is a critical part of
an organization's data strategy!**

Global Network of DASCA CERTIFIED PROFESSIONALS



BANK OF AMERICA



CREDIT SUISSE



THE CANDIDACY TRACKS

Ways to Become an SBDE™

The following table summarizes the specifics of what it takes to become an SBDE™. There are FOUR convenient tracks covering professionals from diverse backgrounds to earn the SBDE™.

SBDE™ Track 1	SBDE™ Track 2	SBDE™ Track 3	SBDE™ Track 4
Bachelor's Degree	Master's Degree	Bachelor's Degree (via DASCA-Recognized Institutions (QualiFLY™))	Master's Degree (via DASCA-Recognized Institutions (QualiFLY™))
Minimum Qualification Required	Minimum Qualification Required	Minimum Qualification Required	Minimum Qualification Required
Should have completed at least a <u>Bachelor's Degree</u> in Computer Science/ Technology/ Engineering/ Applied Sciences or related disciplines from any nationally or internationally accredited institution.	Should have completed a <u>Master's Degree</u> in Computer Science/ Technology/ Engineering/ Applied Sciences or related disciplines from any nationally or internationally accredited institution.	Should have completed a <u>Bachelor's Degree</u> in Computer Science/ Technology/ Engineering/ Applied Sciences or related disciplines from any of the DASCA-accredited or DASCA-recognized Institutions.	Current & past Students of <u>Master's Degree</u> programs in Computer Science/ Technology/ Engineering/ Applied Sciences or related disciplines from any of the DASCA-accredited or DASCA-recognized Institutions.
Minimum Work Experience	Minimum Work Experience	Minimum Work Experience	Minimum Work Experience
Minimum 2 years of computing experience with proficiency in using Python/ or any other programming language	Minimum 1 year of computing experience with proficiency in using Python/ JAVA or any other programming language	Minimum 1 year of computing experience with proficiency in using Python/ JAVA or any other programming language.	Experience not Mandatory; basic proficiency in using Python/ JAVA or any other programming language is desirable.

EXAM PREPARATION MATERIAL

Individuals registered for the SBDE™ credential are provided with the full DASCA Exam Preparation Kit to help them study and prepare for their SBDE™ Certification examination. This kit is provided to all registrants across the world after DASCA has approved their candidacy for SBDE™, and they have processed their payment of the program registration fee.

The DASCA official exam preparation resources provided to registered SBDE™ candidates include:

Print copy of the Handbook 1:
Foundations of Big Data Engineering

Print copy of the Handbook 2:
Advanced Big Data Engineering

Practice tests for SBDE™ exam on
the myDASCA candidate dashboard

Exam preparation guide



EXAMINATION COVERAGE INFORMATION

Official DASCA Exam Preparation Kit is designed to prepare the candidates for the SBDE™ Certification examinations and provide aspiring Big Data Engineer critical exposure to popular proprietary platforms in the Big Data applications space while preparing them for their certification examination as well.

The Official DASCA Exam Preparation Kit contents cover all essential knowledge areas in Big Data and are divided into different sections and modules. For complete details, please see the following page:

EXAMINATION COVERAGE INFORMATION

- **Foundational Data Science**

Framework of data science functions and tools; applying Python and R in making sense of data and deriving information and intelligence for decision-making; framework of concepts and generic models of managing, harnessing and visualizing big data.



12%

- **Data Processing Framework & Hadoop**

Advanced big data processing frameworks; application scenarios of the Hadoop Ecosystem; storing, processing and modeling data in Hadoop 3; Hadoop Ecosystem tools for big data processing; Python and Hadoop 3.

15%

- **Big Data Analytics Basics**

Understanding of data types, data origination modes, streaming data; learning the frameworks of analyzing, managing and harnessing massive data using tools and applications like Python and R.

6%

- **R and Hadoop Applications**

Developing Data Analytics Applications; deploying tools for capturing, processing, sorting, classifying, analyzing, managing and harnessing big data using the Hadoop ecosystem; developing applications using R, Python and MapReduce etc.,

10%

- **Analytics in Machine Learning and Ai**

Framework of data analytics use-cases in machine learning and artificial intelligence; applying generic data analytics tools in machine learning and artificial intelligence; using R and Python to program ML and AI applications.

20%

- **Streaming Data Storage**

Customizing high-volume streaming data storage applications; Deploying MongoDB document-oriented NoSQL database in high volume data storage and processing; MongoDB Data Structuring; MongoDB Shell Application development.

08%

- **Streaming Data Architectures**

Working with real-time analytics systems; developing real-time streaming data architectures; publish-subscribe messaging system; Kafka and Distributed Messaging; Building ETL Pipelines using Kafka; Building streaming applications using Kafka Streams.

08%

- **Streaming & Batch Data Processing**

Principles of applying generic stream and batch data processing techniques; Big Data Processing with Apache, Spark, and Scala; PySpark and SparkR for Big Data Analytics; Big Data Processing with Apache Flink.

12%

- **Enterprise Data Analytics Implementation**

Developing enterprise-wide data analytics ecosystem; developing applications for Elasticsearch and Enterprise Big Data search; Hadoop Cluster deployment and security; Big Data Processing on Cloud; Building a Data Analytics Pipeline.

09%

THE SBDE™ CERTIFICATION PROCESS

01

Start by confirming your fit for SBDE™ and choosing one of the four registration tracks that suit you best. You can check here if the SBDE™ certification meets your career needs and also that you satisfy the minimum candidacy/ eligibility requirements prescribed for SBDE™. Before proceeding, please do check if you are eligible for any special candidacy relaxations under the QualiFly™ program for SBDE™.

02

Next, you must create your myDASCA account to start the application process and indicate in your application form if you are eligible for QualiFly™ program benefits. Once you have submitted the online SBDE™ application and paid the fee, you will receive an acknowledgment response email with instructions for the next steps in the SBDE™ registration process.

03

Once your SBDE™ application is accepted and you have completed your fee payment, your registration in SBDE™ is deemed complete and a registration confirmation message is sent to you. At this point, the full access to your myDASCA account too would be activated.

04

Within 72 hours of registration confirmation, instructions will be released to ship the DASCA exam-preparation kit containing the two Big Data Analytics handbooks to the mailing/ shipping address you have registered with us. Standard delivery timeframe is 3-4 weeks. You must verify the shipping address mentioned on your myDASCA dashboard, and change it if you wish to, within 72 hours of completing your fee payment.

05

Once you are ready for the SBDE™ certification exam, you can register for it right from your dashboard. There is no big hurry, though. DASCA gives SBDE™ candidates a period of 180 days from the date of registration confirmation to pass the SBDE™ certification exam.

06

Once you pass the SBDE™ certification exam and meet the other requirements prescribed by the DASCA Professional Certifications Board (DPCB), the award of the SBDE™ certification is approved for you. While the SBDE™ Digital Badge is released within 96 hours of the award approval, you can expect the physical SBDE™ credential kit (containing a printed SBDE™ certificate and the SBDE™ designation pin) to reach you within 3-4 weeks from the date of award.



ABOUT DASCA

The Data Science Council of America (DASCA) researches, designs, and builds platform-independent Data Science knowledge frameworks, standards, and credentials, and certifies individuals entering or working across the spectrum of emerging Data Science professions. The prime goal of DASCA today is to constantly strive to refine and optimize the numerous roles and jobs in the Big Data/ Data Science space into concrete, sharply defined professions.

DASCA credentials, approaches, initiatives, and programs work toward developing high-quality professionals to address squarely the challenging expectations of Data Science stakeholders internationally. Big Data Engineers, Big Data Analysts, and Data Scientists credentialed by DASCA form the world's top-tier data science professionals.

Data Science Council of America

For further queries, please write to us at info@dasca.org

Connect with us

