# AFRICAN CENTRE OF EXCELLENCE IN DATA







## REGISTRATIONS NOW OPEN FOR GLOBAL DATA SCIENCE CERTIFICATIONS OF DASCA

The African Centre of Excellence in Data Science (ACE-DS) of the University of Rwanda, and the College of Business and Economics (UR-CBE) are pleased to announce the launch of the globally renowned Data Science certification programs of the Data Science Council of America (DASCA).

#### **Objectives**

As a regional leader in data science education and research, ACE-DS is also a DASCA accredited institution aiming to catalyse African industrial and economic growth through latest data science technologies. ACE-DS and the University of Rwanda are leveraging DASCA partnership and programs to enhance professional employability of African technology talent and improve their technology research and development outcomes, besides striving to cultivate large pools of world class data science professionals in Rwanda and other parts of Africa.

#### **Feature Highlights**

Notably, DASCA certifications are the world's most advanced crossplatform programs of their kind, and they address the career needs of ambitious African talents who wish to develop themselves into world-class **Data Analysts**, **Data Engineers** and **Data Scientists**. These certifications help participants build a strong base of knowledge and skills on multiple tools, techniques, concepts and technologies, and in the process, equip them for an exciting breadth of roles and career opportunities that are available with a wide range of Data Science employers across verticals, environments and markets.

#### Deliverables and Takeaways of the Programs

All DASCA-registered participants are provided with the complete suite of learning and exam-preparation resources. This includes printed handbooks as well as digital learning, lab and practice resources with real data sets. Once ready, participants can take their certification exams online on the ExamStrong<sup>TM</sup> platform. Participants who pass and qualify the exams are awarded the DASCA certificate, digital badge, and lapel pin/ badge.

#### **DASCA Certification Exams**

All DASCA certification exams are completely online and digitally proctored, and can be taken anywhere, even at home or in office after obtaining the necessary ExamStrong™ approvals. Examinees generally marking 65% of their answers correct and meeting DASCA candidacy norms qualify for the DASCA credential award. For more details, please visit the DASCA official website <a href="https://www.dasca.org">https://www.dasca.org</a>

WEBSITE: www.aceds.ur.ac.rw

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#### Registration

Registrations for DASCA certification programs are open now under the discounted fee structure offered to ACE-DS as a DASCA accredited institution. Graduating students, career-starters and working professionals interested in these certifications must email at <a href="mailto:aceds@ur.ac.rw">aceds@ur.ac.rw</a> with copy to <a href="mailto:muteelia@gmail.com">muteelia@gmail.com</a> with proof of payment to enable the ACE-DS team commence the registration process. All applicants will receive detailed instructions on their emails about registration steps.

### Bank information for all payment

Bank name: Bank of Kigali; Account name: UR-CBE; Account number: 00094-0651932-39; Currency: RWF & SWIFT CODE: BKIGRWRW

### **DASCA Certification Programs for Data Analysts and Data Engineers**

Applicants are requested to refer to the table below to choose the certification they wish to register in. Details of the programs are available on the ACE-DS website <a href="https://aceds.ur.ac.rw">https://aceds.ur.ac.rw</a> and DASCA website <a href="https://www.dasca.org">https://aceds.ur.ac.rw</a> and DASCA website <a href="https://www.dasca.org">https://www.dasca.org</a>.

Certifications	Registration & Candidacy Pre-requisites	Key Learning Themes	Certification Program fee
1. ASSOCIATE BIG DATA ENGINEER (ABDE <sup>TM</sup> )	The learning scope, requirements, and rigor of the ABDE™ program necessitates that individuals intending to undergo the program have a prior, strong formal exposure and knowledge of the basic concepts of programming, and ideally, are hands—on with the tools and techniques of object oriented programming with knowledge of Core JAVA and SQL.	<ul> <li>Introduction to Data Science &amp; Big Data</li> <li>Big Data storage and processing in Hadoop</li> <li>Sqoop and Flume; Yarn, Hive, and Pig</li> <li>Machine Learning Fundamentals</li> <li>R; Big Data Analytics; Integrating R and Hadoop</li> <li>Basics of Big Data Solution Engineering</li> <li>Big Data tools for Engineers; Python Fundamentals</li> <li>Data Science in Social Media and Mobile applications</li> </ul>	620 USD
2. SENIOR BIG DATA ENGINEER (SBDE <sup>TM</sup> )	Applicants must have a prior, strong formal exposure and knowledge of the basic concepts of programming, and are hands—on with the tools and techniques of object-oriented programming and SQL They must also be confident on scripting languages	<ul> <li>Advanced applications of Data Science &amp; Big Data</li> <li>Storing and processing streaming big data in Hadoop</li> <li>Using Sqoop, Flume; Yarn, Hive, and Pig</li> <li>Machine Learning applications for data</li> </ul>	675 USD

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	like PERL or RUBY, and should have exposure to Linux and Unix environments. Further, SBDE <sup>TM</sup> aspirants should be comfortable on databases and spreadsheets, and at have an understanding of how Big Data is used in business and industry.	<ul> <li>engineers</li> <li>R; Big Data Analytics; Integrating R and Hadoop</li> <li>Using tools of big data application development</li> <li>Developing Big Data Solutions</li> <li>Data Science in Social Media and Mobile applications</li> </ul>	
3. ASSOCIATE BIG DATA ANALYST (ABDA <sup>TM</sup> )	Besides being comfortable with handling databases and spreadsheets, Applicants must have a prior, strong formal exposure and knowledge of the basic concepts in Statistics, with hand—on proficiency in statistical tools and techniques of calculating central tendencies; dispersions and averages; permutations and combinations; probability; creating graphs, charts, histograms, and scatter plots.	<ul> <li>Data Science &amp; Big Data Analytics         Frameworks</li> <li>Essential Data Analytics Tools and Concepts</li> <li>R Programming Applications in Data         Analytics</li> <li>Fundamentals of Big Data Solution         Engineering</li> <li>Social Media, Mobile Analytics, and         Visualization</li> <li>Machine Learning fundamentals</li> <li>Review of Python programming</li> </ul>	620 USD
4. SENIOR BIG DATA ANALYST (SBDA <sup>TM</sup> )	Besides expertise in RDBMS, databases and spreadsheets, all applicants must have a prior, strong formal exposure and knowledge of the basic concepts in Statistics, with hand—on proficiency in statistical tools and techniques of calculating central tendencies; dispersions and averages; permutations and combinations; probability; creating graphs, charts, histograms, and scatter plots. Exposure to Python and tools like SPSS will be extremely useful.	<ul> <li>Applying Big Data Analytics Frameworks</li> <li>Applying Data Analytics Tools and Concepts</li> <li>Deploying R in Advanced Analytics</li> <li>Developing Big Data Analytics Solution</li> <li>Social Media, Mobile Analytics, and Visualization</li> <li>Deploying Data Analytics in Machine Learning</li> </ul>	675 USD

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5. SENIOR DATA SCIENTIST (SDSTM)	The learning scope, requirements, and rigor of the SDSTM program necessitates that individuals intending to undergo the program have a prior, strong formal exposure and knowledge of the basic concepts in Statistics, and are hand—on with the tools and techniques of handling problems of calculating central tendencies; dispersions and averages; permutations and combinations; probability; creating graphs, charts, histograms, and scatter plots.  Indeed, SDSTM aspirants should be also necessarily comfortable with handling databases and spreadsheets. Advanced knowledge of Statistical Analysis techniques and tools; exposure to analytics platforms like SPSS/ SAS; basic exposure to R; quantitative methods; fundamentals of object-oriented programming and RDBMS; good exposure to working on popular/common Big Data programming and analytics platforms etc.	<ul> <li>Data Science for business Stakeholders</li> <li>Data Science</li> <li>Business Potential of Big Data</li> <li>Building Cross-Organizational support</li> <li>Data Science Fundamentals For Data Scientists</li> <li>Data Science Essentials for Data Scientists</li> <li>Advanced Data Science for Data Scientists</li> </ul>	750 USD
6. PRINCIPAL DATA SCIENTIST (PDSTM)	The knowledge requirements and rigor of the PDS <sup>TM</sup> necessitate that individuals intending to undergo the program have a prior, strong formal exposure and knowledge of the basic concepts in Statistics, and are hand—on with the tools and techniques of handling problems of calculating central tendencies; dispersions and averages; permutations and combinations; probability; creating graphs, charts, histograms, and scatter plots.	<ul> <li>Data Science for business Stakeholders</li> <li>Data Science</li> <li>Business Potential of Big Data</li> <li>Building Cross-Organizational support</li> <li>Data Science Fundamentals for Data Scientists</li> <li>Data Science Essentials for Data Scientists</li> <li>Advanced Data Science for Data Scientists</li> </ul>	1,050 USD

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Indeed, PDSTM aspirants should be also necessarily comfortable with handling databases and spreadsheets. Advanced knowledge of Statistical Analysis techniques and tools; exposure to analytics platforms like SPSS/ SAS; basic exposure to R; quantitative methods; fundamentals of object-oriented programming and RDBMS; good exposure to working on popular/common Big Data programming and analytics platforms etc.

For additional information email us at  $\underline{aceds@ur.ac.rw}$  with copy to  $\underline{muteelia@gmail.com}$  or call +250788521896 or +250788456452

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BUSINESS AND

Done at Kigali 10/08/2020

Dr. Charles Ruranga

Director

African Centre of Excellence in Data Science