

Certificate in Big Data and Data Analytics

Why Attend

Across all lines of business, sharp and timely data insights are required to keep an organization competitive in this digital era. Big data is a change agent that challenges the ways in which organizational leaders have traditionally made decisions. Used effectively, it provides accurate business models and forecasts to support better decision-making across all facets of an organization. This course provides participants with the data literacy they need to remain efficient, effective and ahead of the curve. Participants will learn why, where and how to deploy technologies and methodologies, from big data and Hadoop, to data analytics and data science. During the course, all participants will be given access to proprietary online resources for viewing and downloading, including multiple coding demonstrations/examples.

Course Methodology

Participants will be led through a series of hands-on exercises, where they will have the chance to apply and test the methodologies and practical approaches that they are learning throughout the course. As part of this course, participants will produce an actionable big data plan that can be used for enterprise-wide big data deployments.

Course Objectives

By the end of the course, participants will be able to:

- Illustrate the benefits, functionality and ecosystem of big data
- Lead a big data initiative within their organization and generate organizational value by adopting data analytics
- Create well-rounded big data analytics teams by identifying the essential data professional roles
- Design analytics workflows that involve machine learning and advanced analytic methods in order to optimize their line of business and solve complex business problems
- Leverage free, open-source applications to deliver insights that generate an organizational competitive advantage

Target Audience

This course is designed for working professionals who seek to use enterprise data to achieve better, more efficient business results and/or to make improved decisions through predictive analytics. This includes experienced data professionals such as database administrators, system administrators, business analysts or business intelligence specialists, as well as less technically-inclined management and administrative professionals. Recommended pre-knowledge includes experience analyzing data in Excel, as well as a basic understanding of correlation and how to use pivot tables in Excel. Participants should have prior experience working with data that is stored in traditional relational database systems. Some experience with a programming language would be useful as well.

Target Competencies

- Big Data Project Planning
- Data Insight Presentation and Communication
- Data-Informed Decision Making
- Analytics Project Planning
- Data Sourcing

Location & Date

10 Dec - 14 Dec, 2017
Dubai, English
Pullman Hotel JLT

18 Mar - 22 Mar, 2018
Dubai, English

29 Jul - 2 Aug, 2018
Kuala Lumpur, English

9 Dec - 13 Dec, 2018
Dubai, English

Meirc reserves the right to alter dates, content, venue and trainer.

Fees: US\$

Per participant

US\$ 4,900

(including coffee breaks and a buffet lunch daily)



For companies that want to maximize the return on their investment in training: **Register 3 participants** on the same course and dates and pay only for 2.

Course Outline

- **The big data landscape overview**
 - What is Big Data?
 - Big data vs. its predecessors
 - How big data relates to data analytics and data science
 - The big data paradigm
 - Big data professional roles
 - How big data projects benefit businesses and industries
 - The Hadoop ecosystem and architecture
 - Other technologies in the big data paradigm
- **Big data project planning**
 - Beyond the Hadoop ecosystem
 - Other popular projects by MapR
 - Commercial distributions of Hadoop
 - Security within Hadoop
 - Data engineering
 - Useful programming languages
 - The 4-step big data planning process
 - Staying competitive as a big data professional
- **Advanced analytical methods for problem-solving**
 - The nature of data science and analytics
 - Fraud prevention in real-time using machine learning

- Online sales improvement through recommendation engines
- Customer churn prediction and reduction through logistic regression
- Best option selection using multi-criteria decision making
- Stock price predictions using Markov Chains
- Analyzing how price changes impact sales volumes using simple linear regression
- **Basic data science mechanics**
 - The benefits of object-oriented programming
 - Programming Python
 - R programming for data science
 - Where is your data coming from?
 - The traditional relational database management system (RDBMS - DSFD) source
 - Structured Query Language (SQL) in analytics and data science
 - Making value of location data with Geographic Information System (GIS)
 - Machine learning
 - Popular machine learning algorithms
- **Free resources to analyze data and communicate findings**
 - Free applications for data science and analytics
 - Context and benchmarking using free and open data
 - Scraping the web for market data
 - The different types of data visualization
 - Three simple steps to design for your audience
 - Data graphics
 - Design styles to convey powerful messages
 - Design data analytics dashboards