Academy \_



# Certified Big Data Analytics Practitioner

Mastering the Data Universe: Become a Certified Big Data Analytics practitioner for informed decision-making and strategic insights

Course Level: Advanced

Duration: Four Days Attend In-Person or Live Digital In partnership with



EARN UPTO 24 CPD POINTS

# Course Information

#### **Course Overview**

Elevate your leadership and decision-making prowess with our Certified Practitioner in Big Data Analytics course. This program is designed to empower executives with the knowledge and skills required to navigate the transformative landscape of big data. Gain confidence in articulating robust big data architectures, supporting analytics-driven solutions tailored to your organisation's unique needs.

Immerse yourself in hands-on experiences with key big data technologies, enabling you to tackle data-intensive challenges head-on. Acquire the expertise needed to assemble and manage large-scale big data analytics projects. Furthermore, receive a conceptual introduction to the data structures underpinning machine learning algorithms and artificial intelligence applications.

The course goes beyond theory—participants actively identify and implement big data-driven solutions within their organisations, leveraging analytics to drive tangible improvements. Through a series of engaging exercises and workshops, you'll apply practical approaches learned during the programme.

As a culmination, you'll craft an actionable big data plan and architectural diagram, providing you with a powerful blueprint for implementation within your organisation. Transform your leadership approach and stay ahead in the data-driven era with our Certified Practitioner in Big Data Analytics course.



## **Education Partner**



Established in 1996, The CPD Certification Service is the independent CPD accreditation centre working across all sectors, disciplines and further learning applications and supports policies of institutional and professional organisations globally.

CPD is the term used to describe the learning activities professionals engage in to develop and enhance their abilities and keep skills and knowledge up-to-date. This course is an accredited Continuing Professional Development (CPD) training which means it meets CPD standards and benchmarks. The learning value has been scrutinised to ensure integrity and quality.

# Course Information

# **Key Learning Outcomes**

- Big Data Analytics
- Machine Learning as a sub-set of Artificial Intelligence
- Assemble large scale analytics projects
- Manage large scale analytics projects
- Understand data structures
- Suite of methodologies for Big Data Analytics
- Design big data implementation plans and strategics for data-driven solutions
- Understand the appropriate technologies required for Big Data and the limitations of current technologies
- Understand and implement machine learning algorithms
- Deliver an architectural diagram for analytics focused use cases

# **Equipment Needed**

Delegates are required to bring their laptop all throughout the session.

## **Who Should Attend**

- Data Analysts
- Data Engineers
- Data Scientists
- Administrative professions

## **Added Value**

- Develop an actionable big data plan
- Produce an actionable architectural plan for their organisation
- Create a framework that is relevant for assessment and implementation of Big Data Analytics



# Course Information

# **Course Requirements and Certificates**

Delegates must meet two criteria to be eligible for an Informa Connect Academy (ICA) Certificate of Completion:

- Satisfactory attendance Delegates must attend all sessions of the course. Delegates who miss more than 2 hours of the course sessions will not be eligible to sit the course assessment
- Successful completion of the course assessment Assessments will be ongoing and based on in-class participation and activities

Delegates who do not meet these criteria will receive an ICA Certificate of Attendance. If delegates have not attended all sessions, the certificate will clearly state the number of hours attended. In-person delegates will receive a printed (or hard copy) certificate and digital delegates will receive a soft copy.

# **Competencies**

These are the main capabilities/proficiencies that the course will equip the delegates with:

- Develop an actionable big data plan
- Actionable big data architectural plan
- Create a framework that is relevant for assessments and implementation of Big Data Analytics

## **Course Schedule**

The course will commence at 9:30 and end at 16:30 GST (GMT+4). There will be short refreshment breaks and an hour-long lunch break at 12:45.



# Meet Your Course Directors



Prof. Manoj Chiba

Prof. Manoj Chiba is a management professional and has held senior positions in different sectors, with a deep technical expertise in data and technology, with over 18 years of experience. This experience has allowed him to draw on the relevant understanding to exploit opportunities and align strategies. Prof. Chiba's training, qualifications and passion for data and the intersection with technology drive his underlying philosophy for evidence-based decision-making and the impact on the future of business and society.

Some of his work includes Data Science, serving as a data scientist; building data science capabilities and operationalising this capability sustainably within organisations of different sizes; strategy and structure consulting work; price-setting strategies for organisations; market share analysis; and SME for legal cases and innovation consulting.

Prof. Chiba has consulted to over 65 companies locally and globally, and additionally has served as an Executive for Business Intelligence, and Executive Chief Data Scientist for listed organisations, Data Analyst, and Director of Technology and Data.

In addition, Manoj has founded two data companies, served as Chief Executive Officer and serves on the Board of Directors of two technology companies. Currently, Manoj has been extensively profiled as a thought leader in FinTech, AI, and Emerging Technologies. He has deep experience across Financial Services, Retail, Oil and Gas, and Agriculture industries.



### Day 1: Introduction to Big Data and Data Processing Technologies

### **Understanding Big Data**

- What is Big Data and how we define it
- Challenges and opportunities in Big Data Analytics
- Overview of popular Big Data frameworks (Hadoop, SPARK)

#### **Introduction to Hadoop**

- What is Hadoop
- Setting-up a Hadoop cluster environment
- Basics of Hadoop Distributed File System (HDFS)
- Introduction to MapReduce for distributed data processing

**Application 1:** Install and configure a small Hadoop cluster using virtual machines or cloud services

**Application 2:** Create a sample dataset and store it in HDFS

**Application 3:** Write a basic MapReduce program to process and analyse the data

#### Day 2: Data Storage and Management in Big Data Environments

#### **NoSQL Databases for Big Data**

- Introduction to NoSQL databases (MongoDB, Cassandra)
- Use cases for NoSQL databases in Big Data Analytics
- Comparisons with traditional relational databases

#### **NoSQL Database Implementation**

- Setting-up and configuring a NoSQL database
- Basic CRUD operations with NoSQL databases
- Integrating NoSQL databases with Big Data Frameworks

Application 1: Install and set-up a NoSQL database

**Application 2:** Create a database schema and perform a CRUD operations on sample data

**Application 3:** Explore integration of NoSQL databases with Hadoop for data processing



# Course Outline

# Day 3: Big Data Analytics with Apache Spark

#### **Introduction to Apache Spark**

- Overview of Apache Spark
- Basics of Spark architecture: RDDs, DataFrames, and SparkSQL
- Spark for data processing, machine learning and graph processing

#### **Spark Analytics**

- Setting up a Spark environment
- Implementing Spark applications for data analysis
- Utilising Spark MLlib for machine learning on Big Data

**Application 1:** Set-up a Spark environment and load a dataset for analysis

**Application 2:** Develop a Spark application to perform data transformations and aggregations

**Application 3:** Utilise Spark MLlib for a simple machine learning task (e.g. classification or regression)

#### Day 4: Advances Topics and Real-world Applications in Big Data Analytics

#### **Advanced Analytics**

- Exploring advanced analytics techniques in Big Data (stream processing, deep learning)
- Introduction to real-time analytics with tools like Apache Flink
- Addressing security and privacy concerns in Big Data Analytics
- Capstone project
- Participants work on a comprehensive capstone project applying concepts learned throughout the course

**Application 1:** Capstone project applying Spark, NoSQL databases

**Application 2:** Tackle a real-world problem or scenario using advanced analytics techniques

#### **Recap of Course**



# Certified Big Data Analytics Practitioner



Attend In-Person	Attend Live Digital
US\$ 5,445	US\$ 3,025

Pricing excludes 5% VAT, charged where applicable.

# To Register Click Here

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## Want To Run This Course In-Company?

#### ABOUT INFORMA CONNECT ACADEMY

# Informa Connect

Informa Connect Academy is a premier provider of global education and training solutions that caters to a diverse range of professionals, industries, and educational partners. We are dedicated to promoting lifelong learning and are committed to offering learners expert guidance, training, and resources to help them stay competitive in a rapidly changing world.

Our comprehensive range of courses and programmes are tailored to meet the needs of all professionals, from aspiring specialists to seasoned experts. We partner with elite academic organisations and industry leaders with unmatched expertise in their respective fields to deliver an exceptional learning experience.

#### ABOUT PRICING AND DOCUMENTATION

Pricing excludes 5% VAT, charged where applicable.

Course fees include documentation, luncheon and refreshments for in-person learners. Delegates who attend all sessions and successfully complete the assessment, will receive a Informa Certificate and any applicable partner certificates. A hard copy will be provided to in-person learners and a soft-copy will be provided to virtual learners.

#### **AVOID VISA DELAYS - BOOK NOW**

Delegates requiring visas should contact the hotel they wish to stay at directly, as soon as possible.

Visas for non-GCC nationals may take several weeks to process.

#### REGISTRATION, PAYMENTS AND CANCELLATION

All registrations are subject to our terms and conditions which are available at www.informa-mea.com/terms. Please read them as they include important information. By submitting your registration, you agree to be bound by the terms and conditions in full. All registrations are subject to acceptance by Informa Connect which will be confirmed to you in writing.

A confirmation letter and invoice will be sent upon receipt of your registration. Please note that full payment must be received prior to the course. Only those delegates whose fees have been paid in full will be admitted to the course.

For full cancellation details, please visit <a href="https://informaconnect.com/terms-of-use/">https://informaconnect.com/terms-of-use/</a> All cancellations must be sent by email to register-mea@informa.com marked for the attention of Customer Services Cancellation. Due to unforeseen circumstances, Informa Connect reserves the right to cancel the course, change the programme, alter the venue, speaker or topics. For full details, please visit www.informaconnect.com

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