



DUAL MASTER'S PROGRAM DATA SCIENCE AND ARTIFICIAL INTELLIGENCE

In collaboration with IBM

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About the Program

Create a dynamic career in the field of Data Science and Artificial Intelligence with Simplilearn's Dual Master's program in collaboration with IBM. This program offers everything a person needs to master these two complementary disciplines. The curriculum covers all concepts of Data Science and Artificial Intelligence helping you master the specialized skills that organizations around the world are seeking.

This Dual Master's Program offers extensive training on the most in-demand Data Science and Artificial Intelligence skills with hands-on exposure to critical tools and technologies including R, Python, Big Data, Machine Learning, Natural Language Processing, Deep Learning, and Tableau. Leverage this program in collaboration with IBM to become an expert in Data Science and Artificial Intelligence and master powerful programming skills to transform your career.



Key Features



Two Simplilearn Master's certificates



Industry-oriented learning paths



400+ hours of extensive learning



Two capstone projects and 30+ industry projects



Industry-recognized certificates from IBM



\$1,200 worth of IBM Cloud credits



Lifetime access to self-paced learning and class recordings*

*Simplilearn courses only

About IBM and Simplilearn collaboration

A joint partnership with Simplilearn and IBM introduces students to an integrated blended learning, making them an expert in Artificial Intelligence and Data Science. The program in collaboration with IBM will make students industry ready for Artificial Intelligence and Data Science job roles. IBM is a leading cognitive solution and cloud platform

company, headquartered in Armonk, New York, offering a plethora of technology and consulting services. Each year, IBM invests \$6 billion in research and development and has achieved five Nobel Laureates, nine US National Medals of Technology, five US National Medals of Science, six Turing Awards, and 10 Inductees in US Inventors Hall of Fame.

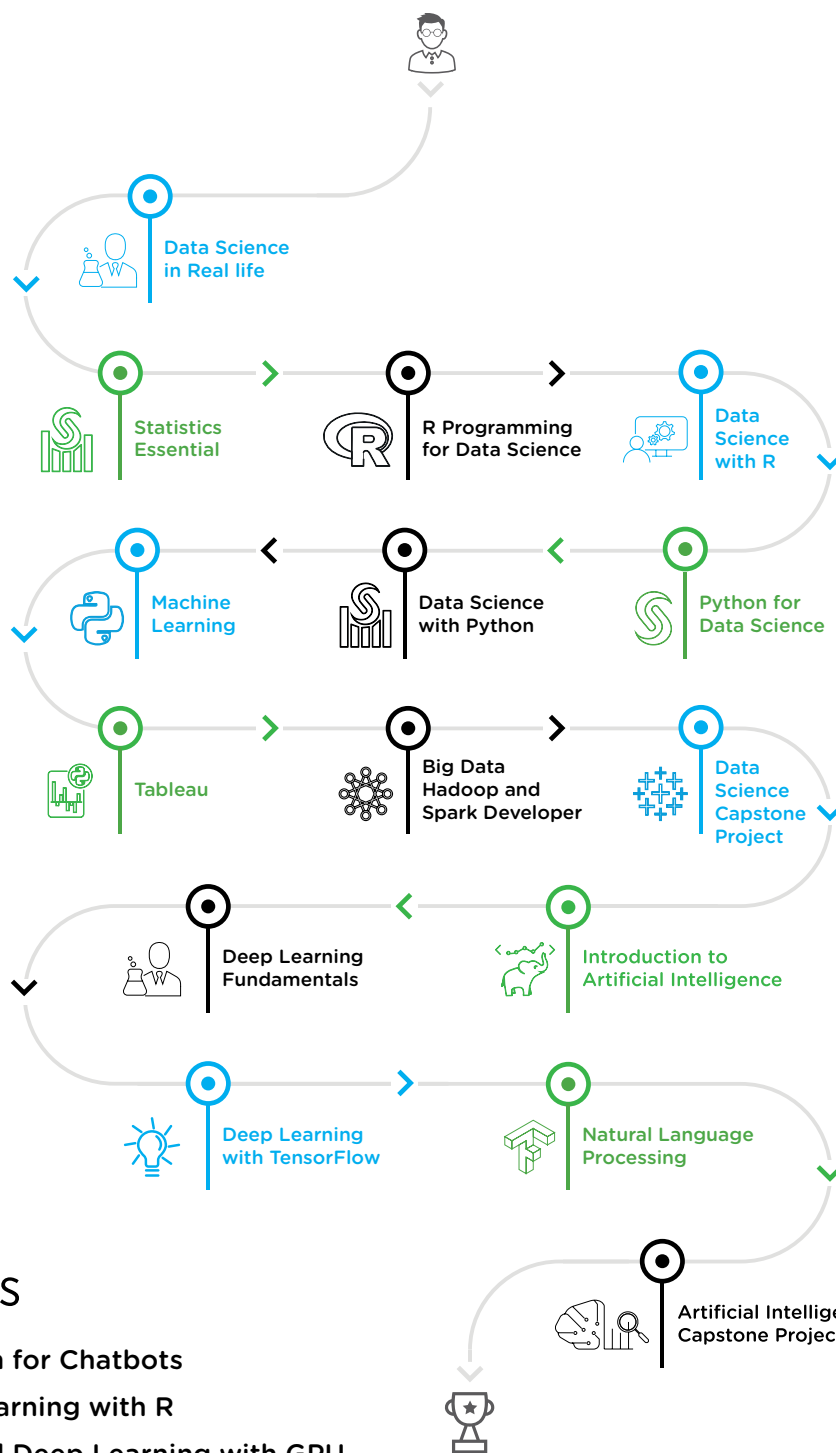


About Simplilearn

Simplilearn is a leader in digital skills training, focused on the emerging technologies that are transforming our world. Our blended learning approach drives learner engagement and backed by the industry's highest completion

rates. Partnering with professionals and companies, we identify their unique needs and provide outcome-centric solutions to help them achieve their professional goals.

Learning Path



Electives

- > IBM Watson for Chatbots
- > Machine Learning with R
- > Accelerated Deep Learning with GPU

Master's Program Outcomes



Gain an in-depth understanding of data structure and data manipulation



Understand supervised and unsupervised learning models including linear regression, logistic regression, clustering, dimensionality reduction, K-NN, and pipeline



Perform scientific and technical computing using the SciPy package and its sub-packages including Integrate, Optimize, Statistics, IO, and Weave



Gain expertise in mathematical computing using the NumPy and Scikit-Learn



Master the concepts recommendation engine and time series modeling



Comprehend the principles, algorithms, and applications of Machine Learning



Learn the applications of Artificial Intelligence across various use cases across different fields like customer service, financial services, healthcare, and more



Implement classical Artificial Intelligence techniques such as search algorithms, neural networks, and tracking



Learn how to apply Artificial Intelligence techniques for problem-solving and explain the limitations of current Artificial Intelligence techniques

Master's Program Outcomes



Design and build your own intelligent agents and apply them to create practical Artificial Intelligence projects including games, Machine Learning models, logic constraint satisfaction problems, knowledge-based systems, probabilistic models, agent decision-making functions, and more



Understand the concepts of TensorFlow, its main functions, operations, and the execution pipeline



Master advanced topics such as convolutional neural networks, recurrent neural networks, training deep networks, and high-level interfaces



Analyze data using Tableau and become proficient in building interactive dashboards



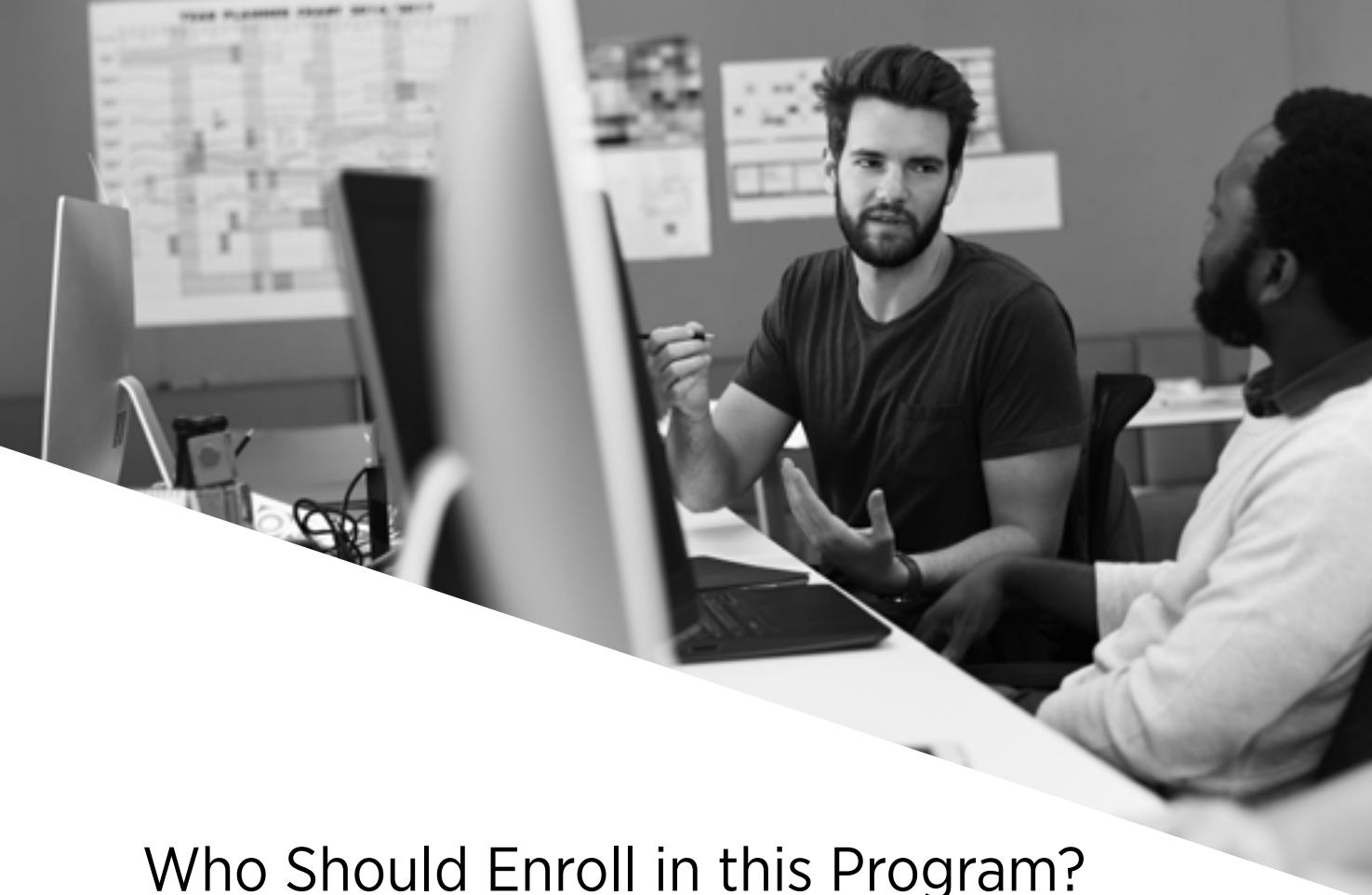
Understand the different components of the Hadoop ecosystem and learn to work with HBase, its architecture and data storage, learning the difference between HBase and RDBMS, and use Hive and Impala for partitioning



Understand MapReduce and its characteristics, plus learn how to ingest data using Sqoop and Flume



Understand the fundamentals of Natural Language Processing using the most popular library; Python's Natural Language Toolkit (NLTK)



Who Should Enroll in this Program?

A Data Science and Artificial Intelligence role requires an amalgam of experience, knowledge, and discernment to use the correct tools and technologies. It is a solid career choice for both new and experienced professionals. Aspiring professionals of any educational background with an analytical frame of mind are most suited to pursue this Dual Master's Program in Data Science and Artificial Intelligence, including:

- ✓ IT professionals
- ✓ Business analysts
- ✓ Analytics managers who are leading a team of analysts
- ✓ Information architects interested in Artificial Intelligence
- ✓ Developers aspiring to be an Artificial Intelligence Engineer or Machine Learning Engineer
- ✓ Software developers
- ✓ Beginners or recent Graduates looking to build a career in Data Science and/or Artificial Intelligence

Data Science in Real life

Data Science is the highly sought field of the century. Explore the truth about what Data Science is and hear from real practitioners telling real stories about what it means to work in Data Science and use cases for the same.

Key Learning Objectives

- ✓ Gain fundamental knowledge of what is Data Science and what do Data Science people do
- ✓ Learn about Data Science in a business context and what is the future of Data Science
- ✓ Understand Data Science applications and discover some use cases for Data Science

Course curriculum

- ✓ Lesson 1 - Defining Data Science
- ✓ Lesson 2 - What Does a Data Science Professional Do?
- ✓ Lesson 3 - Data Science in Business
- ✓ Lesson 4 - Use Cases for Data Science
- ✓ Lesson 5 - Data Science People

Statistics Essential

Statistics is the science of assigning a probability to an event based on experiments. It is the application of quantitative principles to the collection, analysis, and presentation of numerical data. Ace the fundamentals of Data Science, statistics, and Machine Learning with this course. It will enable you to define statistics and essential terms related to it, explain measures of central tendency and dispersion, and comprehend skewness, correlation, regression, distribution. You will be able to make data-driven predictions through statistical inference.

Key Learning Objectives

- ✓ Understand the fundamentals of statistics
- ✓ Work with different types of data
- ✓ How to plot different types of data
- ✓ Calculate the measures of central tendency, asymmetry, and variability
- ✓ Calculate correlation and covariance
- ✓ Distinguish and work with different types of distribution
- ✓ Estimate confidence intervals
- ✓ Perform hypothesis testing
- ✓ Make data-driven decisions
- ✓ Understand the mechanics of regression analysis
- ✓ Carry out regression analysis
- ✓ Use and understand dummy variables
- ✓ Understand the concepts needed for data science even with Python and R

Course curriculum

- ✓ Lesson 1 - Introduction
- ✓ Lesson 2 - Sample or Population Data?
- ✓ Lesson 3 - The Fundamentals of Descriptive Statistics
- ✓ Lesson 4 - Measures of Central Tendency, Asymmetry, and Variability
- ✓ Lesson 5 - Practical Example: Descriptive Statistics
- ✓ Lesson 6 - Distributions
- ✓ Lesson 7 - Estimators and Estimates
- ✓ Lesson 8 - Confidence Intervals: Advanced Topics
- ✓ Lesson 9 - Practical Example: Inferential Statistics
- ✓ Lesson 10 - Hypothesis Testing: Introduction
- ✓ Lesson 11 - Hypothesis Testing: Let's Start Testing!
- ✓ Lesson 12 - Practical Example: Hypothesis Testing
- ✓ Lesson 13 - The Fundamentals of Regression Analysis
- ✓ Lesson 14 - Subtleties of Regression Analysis
- ✓ Lesson 15 - Assumptions for Linear Regression Analysis
- ✓ Lesson 16 - Dealing with Categorical Data
- ✓ Lesson 17 - Practical Example: Regression Analysis

R Programming for Data Science

Gain insight into the R Programming language with this introductory course. An essential programming language for data analysis, R Programming is a fundamental key to becoming a successful Data Science professional. In this course you will learn how to write R code, learn about R's data structures, and create your own functions. After the completion of this course, you will be fully able to begin your first data analysis.

Key Learning Objectives

- ✓ Learn about math, variables, and strings, vectors, factors, and vector operations
- ✓ Gain fundamental knowledge on arrays and matrices, lists, and data frames
- ✓ Get understanding on conditions and loops, functions in R, objects, classes, and debugging
- ✓ Learn how to accurately read text, CSV and Excel files plus how to write and save data objects in R to a file
- ✓ Understand and work on strings and dates in R

Course curriculum

- ✓ Lesson 1 - R Basics
- ✓ Lesson 2 - Data Structures in R
- ✓ Lesson 3 - R Programming Fundamentals
- ✓ Lesson 4 - Working with Data in R
- ✓ Lesson 5 - Stings and Dates in R

Data Science with R

The next step to a data scientist is learning R - the upcoming and most in-demand open source technology. R is an extremely powerful Data Science and analytics language which has a steep learning curve and a very vibrant community. This is why it is quickly becoming the technology of choice for organizations who are adopting the power of analytics for competitive advantage.

Key Learning Objectives

- ✓ Gain a foundational understanding of business analytics
- ✓ Install R, R-studio, and workspace setup, and learn about the various R packages
- ✓ Master R programming and understand how various statements are executed in R
- ✓ Gain an in-depth understanding of data structure used in R and learn to import/export data in R
- ✓ Define, understand and use the various apply functions and DPYR functions
- ✓ Understand and use the various graphics in R for data visualization
- ✓ Gain a basic understanding of various statistical concepts
- ✓ Understand and use hypothesis testing method to drive business decisions
- ✓ Understand and use linear, non-linear regression models, and classification techniques for data analysis
- ✓ Learn and use the various association rules and Apriori algorithm
- ✓ Learn and use clustering methods including K-means, DBSCAN, and hierarchical clustering

Course curriculum

- ✓ Lesson 1 - Introduction to Business Analytics
- ✓ Lesson 2 - Introduction to R Programming
- ✓ Lesson 3 - Data Structures
- ✓ Lesson 4 - Data Visualization
- ✓ Lesson 5 - Statistics for Data Science I
- ✓ Lesson 6 - Statistics for Data Science II
- ✓ Lesson 7 - Regression Analysis
- ✓ Lesson 8 - Classification
- ✓ Lesson 9 - Clustering
- ✓ Lesson 10 - Association

Python for Data Science

Kickstart your learning of Python for Data Science with this introductory course and familiarize yourself with programming. Carefully crafted by IBM, upon completion of this course you will be able to write your Python scripts, perform fundamental hands-on data analysis using the Jupyter-based lab environment, and create your own Data Science projects using IBM Watson.

Key Learning Objectives

- ✔ Write your first Python program by implementing concepts of variables, strings, functions, loops, conditions
- ✔ Understand the nuances of lists, sets, dictionaries, conditions and branching, objects and classes
- ✔ Work with data in Python such as reading and writing files, loading, working, and saving data with Pandas

Course curriculum

- ✔ Lesson 1 - Python Basics
- ✔ Lesson 2 - Python Data Structures
- ✔ Lesson 3 - Python Programming Fundamentals
- ✔ Lesson 4 - Working with Data in Python
- ✔ Lesson 5 - Working with NumPy arrays

Data Science with Python

This Data Science with Python course will establish your mastery of Data Science and analytics techniques using Python. With this Python for Data Science Course, you'll learn the essential concepts of Python programming and gain in-depth knowledge in data analytics, Machine Learning, data visualization, web scraping, and natural language processing. Python is a required skill for many Data Science positions, so jump start your career with this interactive, hands-on course.

Key Learning Objectives

- ✔ Gain an in-depth understanding of Data Science processes, data wrangling, data exploration, data visualization, hypothesis building, and testing. You will also learn the basics of statistics
- ✔ Install the required Python environment and other auxiliary tools and libraries
- ✔ Understand the essential concepts of Python programming such as data types, tuples, lists, dicts, basic operators and functions
- ✔ Perform high-level mathematical computing using the NumPy package and its vast library of mathematical functions
- ✔ Perform scientific and technical computing using the SciPy package and its sub-packages such as Integrate, Optimize, Statistics, IO, and Weave
- ✔ Perform data analysis and manipulation using data structures and tools provided in the Pandas package
- ✔ Gain expertise in Machine Learning using the Scikit-Learn package
- ✔ Gain an in-depth understanding of supervised learning and unsupervised learning models such as linear regression, logistic regression, clustering, dimensionality reduction, K-NN and pipeline

- ✔ Use the Scikit-Learn package for natural language processing
- ✔ Use the matplotlib library of Python for data visualization
- ✔ Extract useful data from websites by performing web scraping using Python
- ✔ Integrate Python with Hadoop, Spark, and MapReduce

Course curriculum

- ✔ Lesson 1 - Data Science Overview
- ✔ Lesson 2: Data Analytics Overview
- ✔ Lesson 3: Statistical Analysis and Business Applications
- ✔ Lesson 4: Python Environment Setup and Essentials
- ✔ Lesson 5: Mathematical Computing with Python (NumPy)
- ✔ Lesson 6 - Scientific computing with Python (Scipy)
- ✔ Lesson 7 - Data Manipulation with Pandas
- ✔ Lesson 8 - Machine Learning with Scikit-Learn
- ✔ Lesson 9 - Natural Language Processing with Scikit Learn
- ✔ Lesson 10 - Data Visualization in Python using matplotlib
- ✔ This lesson teaches you to visualize data in python using matplotlib and plot them.
- ✔ Lesson 11 - Web Scraping with BeautifulSoup
- ✔ Lesson 12 - Python integration with Hadoop MapReduce and Spark

Machine Learning

Simplilearn's Machine Learning course will make you an expert in Machine Learning, a form of Artificial Intelligence that automates data analysis to enable computers to learn and adapt through experience to do specific tasks without explicit programming. You will master Machine Learning concepts and techniques, including supervised and unsupervised learning, mathematical and heuristic aspects, and hands-on modeling to develop algorithms and prepare you for your role with advanced Machine Learning knowledge.

Key Learning Objectives

- ✔ Master the concepts of supervised and unsupervised learning, recommendation engine, and time series modeling
- ✔ Gain practical mastery over principles, algorithms, and applications of Machine Learning through a hands-on approach that includes working on four major end-to-end projects and 25+ hands-on exercises
- ✔ Acquire thorough knowledge of the statistical and heuristic aspects of Machine Learning
- ✔ Implement models such as support vector machines, kernel SVM, naive Bayes, decision tree classifier, random forest classifier, logistic regression, K-means clustering and more in Python
- ✔ Validate Machine Learning models and decode various accuracy metrics. Improve the final models using another set of optimization algorithms, which include Boosting and Bagging techniques
- ✔ Comprehend the theoretical concepts and how they relate to the practical aspects of Machine Learning

Course curriculum

- ✓ Lesson 1: Introduction to Artificial Intelligence and Machine Learning
- ✓ Lesson 2: Data Preprocessing
- ✓ Lesson 3: Supervised Learning
- ✓ Lesson 4: Feature Engineering
- ✓ Lesson 5: Supervised Learning-Classification
- ✓ Lesson 6: Unsupervised Learning
- ✓ Lesson 7: Time Series Modelling
- ✓ Lesson 8: Ensemble Learning
- ✓ Lesson 9: Recommender Systems
- ✓ Lesson 10: Text Mining

Tableau Desktop 10

This Tableau Desktop 10 training will help you master the various aspects of the program and gain skills such as building visualization, organizing data, and designing dashboards. You will also learn concepts of statistics, mapping, and data connection. It is an essential asset to those wishing to succeed in Data Science.

Key Learning Objectives

- ✓ Grasp the concepts of Tableau Desktop 10, become proficient with statistics and build interactive dashboards
- ✓ Master data sources and data blending, create data extracts and organize and format data
- ✓ Master arithmetic, logical, table and LOD calculations and ad-hoc analytics
- ✓ Become an expert on visualization techniques such as heat map, tree map, waterfall, Pareto, Gantt chart and market basket analysis
- ✓ Learn to analyze data using Tableau Desktop as well as clustering and forecasting techniques
- ✓ Gain command of mapping concepts such as custom geocoding and radial selections
- ✓ Master Special Field Types and Tableau Generated Fields and the process of creating and using parameters
- ✓ Learn how to build interactive dashboards, story interfaces and how to share your work

Course curriculum

- ✔ Lesson 1 - Getting Started with Tableau
- ✔ Lesson 2 - Working with Tableau
- ✔ Lesson 3 - Deep diving with Data and Connections
- ✔ Lesson 4 - Creating Charts
- ✔ Lesson 5 - Adding Calculations to your workbook
- ✔ Lesson 6 - Mapping Data in Tableau
- ✔ Lesson 7 - Dashboards and Stories
- ✔ Lesson 8 - Visualizations for an Audience

Big Data Hadoop and Spark Developer

Simplilearn's Big Data Hadoop Training Course helps you master Big Data and Hadoop Ecosystem tools, such as HDFS, YARN, MapReduce, Hive, Impala, Pig, HBase, Spark, Flume, Sqoop, Hadoop Frameworks, and more concepts of Big Data processing life cycle. Throughout this online instructor-led Hadoop Training, you will be working on real-time projects on Retail, Tourism, Finance, etc. This Big Data Course also prepares you for Cloudera's CCA175 Big Data certification.

Key Learning Objectives

- ✓ Learn how to navigate the Hadoop Ecosystem and understand how to optimize its use
- ✓ Ingest data using Sqoop, Flume, and Kafka
- ✓ Implement partitioning, bucketing, and indexing in Hive
- ✓ Work with RDD in Apache Spark
- ✓ Process real-time streaming data
- ✓ Perform DataFrame operations in Spark using SQL queries
- ✓ Implement User-Defined Functions (UDF) and User-Defined Attribute Functions (UDAF) in Spark

Course curriculum

- ✓ Lesson 1 - Introduction to Bigdata and Hadoop
- ✓ Lesson 2 - Hadoop Architecture Distributed Storage (HDFS) and YARN
- ✓ Lesson 3 - Data Ingestion into Big Data Systems and ETL
- ✓ Lesson 4 - Distributed Processing MapReduce Framework and Pig

- ✓ Lesson 5 - Apache Hive
- ✓ Lesson 6 - NoSQL Databases HBase
- ✓ Lesson 7 - Basics of Functional Programming and Scala
- ✓ Lesson 8 - Apache Spark Next-Generation Big Data Framework
- ✓ Lesson 9 - Spark Core Processing RDD
- ✓ Lesson 10 - Spark SQL Processing DataFrames
- ✓ Lesson 11 - Spark MLLib Modelling BigData with Spark
- ✓ Lesson 12 - Stream Processing Frameworks and Spark Streaming
- ✓ Lesson 13 - Spark GraphX

Data Science Capstone Project

This Data Science Capstone project will give you an opportunity to implement the skills you learned throughout this Program. Through dedicated mentoring sessions, you'll learn how to solve a real-world, industry-aligned Data Science problem, from data processing and model building to reporting your business results and insights. The project is the final step in the learning path and will enable you to showcase your expertise in Data Science to future employers.

Key Learning Objectives

Simplilearn's online Data Science Capstone course will bring you through the Data Science decision cycle, including data processing, building a model and representing results. The project milestones are as follows:

- ✓ Data Processing - In this step, you will apply various data processing techniques to make raw data meaningful.
- ✓ Model Building - You will leverage techniques such as regression and decision trees to build Machine Learning models that enable accurate and intelligent predictions. You may explore Python, R or SAS to build your model. You will follow the complete model-building exercise from data split to test and training and validating data using the k-fold cross-validation process.
- ✓ Model Fine-tuning - You will apply various techniques to improve the accuracy of your model and select the champion model that provides the best accuracy.
- ✓ Dashboarding and Representing Results - As the final step, you will be required to export your results into a dashboard with meaningful insights using Tableau

Introduction to Artificial Intelligence

Simplilearn's Introduction to Artificial Intelligence course is designed to help learners decode the mystery of Artificial Intelligence and understand its business applications. The course provides an overview of Artificial Intelligence concepts and workflows, Machine Learning, Deep Learning, and performance metrics. You'll learn the difference between supervised, unsupervised, and reinforcement learning-be exposed to use cases, and see how clustering and classification algorithms help identify Artificial Intelligence business applications.

Key Learning Objectives

- ✔ Meaning, purpose, scope, stages, applications, and effects of Artificial Intelligence
- ✔ Fundamental concepts of Machine Learning and Deep Learning
- ✔ Difference between supervised, semi-supervised and unsupervised learning
- ✔ Machine Learning workflow and how to implement the steps effectively
- ✔ The role of performance metrics and how to identify their essential methods

Course curriculum

- ✔ Lesson 1 - Decoding Artificial Intelligence
- ✔ Lesson 2 - Fundamentals of Machine Learning and Deep Learning
- ✔ Lesson 3 - Machine Learning Workflow
- ✔ Lesson 4 - Performance Metrics

Deep Learning Fundamentals

This course by IBM is designed to help you learn the fundamentals of Deep Learning. It will make you familiar with the concepts of Deep Learning, Convolutional neural networks, and the effectiveness of Deep Learning. Be part of a rapidly growing field in Data Science; there's no better time than now to get started with neural networks.

Key Learning Objectives

- ✔ Gain understanding of Deep Learning
- ✔ Understand Deep Learning models such as convolutional networks, recurrent nets, Autoencoders, Recursive Neural Tensor Nets, and Deep Learning Use Cases
- ✔ Comprehend Deep Learning platforms and software libraries

Course curriculum

- ✔ Lesson 1 - Introduction to Deep Learning
- ✔ Lesson 2 - Deep Learning Models
- ✔ Lesson 3 - Additional Deep Learning Models
- ✔ Lesson 4 - Deep Learning Platforms and Software Libraries

Deep Learning with TensorFlow

This Deep Learning with TensorFlow course by IBM will refine your Machine Learning knowledge and make you an expert in Deep Learning using TensorFlow. Master the concepts of Deep Learning and TensorFlow to build artificial neural networks and traverse layers of data abstraction. This course will help you learn to unlock the power of data and prepare you for new horizons in Artificial Intelligence.

Key Learning Objectives

- ✓ Understand the difference between linear and non-linear regression
- ✓ Comprehend Convolutional Neural Networks and their applications
- ✓ Gain familiarity on Recurrent Neural Networks (RNN) and Autoencoders
- ✓ Learn how to filter with Restricted Boltzmann Machine

Course curriculum

- ✓ Lesson 1 - Introduction to TensorFlow
- ✓ Lesson 2 - Convolutional Neural Networks (CNN)
- ✓ Lesson 3 - Recurrent Neural Networks (RNN)
- ✓ Lesson 4 - Unsupervised Learning
- ✓ Lesson 5 - Autoencoders

Natural Language Processing

This Natural Language Processing course will give you a detailed look at the science behind applying Machine Learning algorithms to process large amounts of natural language data. You will learn the concepts of Natural Language understanding, Feature Engineering, Natural Language Generation and Speech Recognition techniques.

Key Learning Objectives

- ✓ Learn how to perform text processing and find a pattern
- ✓ Find the most relevant document by applying TF-IDF
- ✓ Write a script for applying parts-of-speech and extraction on focus words
- ✓ Create your own NLP module
- ✓ Classify the cluster for articles
- ✓ Create a basic speech model
- ✓ Convert speech to text

Course curriculum

- ✓ Lesson 1 - Introduction to Natural Language Processing
- ✓ Lesson 2 - Feature Engineering on Text Data
- ✓ Lesson 3 - Natural Language Understanding Techniques
- ✓ Lesson 4 - Natural Language Generation
- ✓ Lesson 5 - Natural Language Processing Libraries
- ✓ Lesson 6 - Natural Language Processing with Machine Learning and Deep Learning
- ✓ Lesson 7 - Speech Recognition Technique

Artificial Intelligence Capstone Project

Simplilearn's Artificial Intelligence Capstone project will allow you to implement the skills you learned in the masters of Artificial Intelligence. With dedicated mentoring sessions, you'll know how to solve a real industry-aligned problem. You'll learn various Artificial Intelligence-based supervised and unsupervised techniques like Regression, SVM, Tree-based algorithms, NLP, etc. The project is the final step in the learning path and will help you to showcase your expertise to employers.

Key Learning Objectives

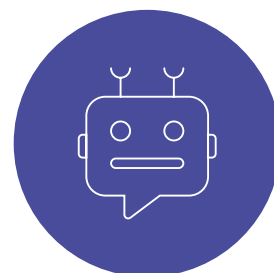
Simplilearn's online Artificial Intelligence Capstone course will bring you through the Artificial Intelligence decision cycle, including Exploratory Data Analysis, building and fine-tuning a model with cutting edge Artificial Intelligence-based algorithms and representing results. The project milestones are as follows:

- ✓ Exploratory Data Analysis - In this step, you will apply various data processing techniques to determine the features and correlation between them, transformations required to make the data sense, new features, construction, etc.
- ✓ Model Building and fitting - This will be performed using Machine Learning algorithms like regression, multinomial Naïve Bayes, SVM, tree-based algorithms, etc.
- ✓ Unsupervised learning - Clustering to group similar kind of transactions/reviews using NLP and related techniques to devise meaningful conclusions.
- ✓ Representing results - As a last step, you will be required to export your results into a dashboard with useful insights.

Elective Course

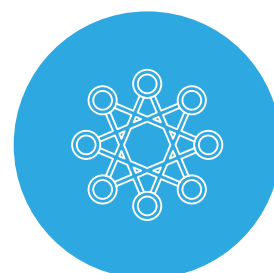
IBM Watson for Chatbots:

Data Science is the highly sought field of the century. Explore the truth about what Data Science is and hear from real practitioners telling real stories about what it means to work in Data Science and use cases for the same.



Machine Learning with R:

In this course, you will learn how to write R code, learn about R's data structures, and create your own functions. With the knowledge gained, you will be ready to undertake your first very own data analysis. You'll further learn about Supervised vs Unsupervised Learning, look into how Statistical Modeling relates to Machine Learning, and do a comparison of each using R.



Accelerated Deep Learning with GPU:

In this Accelerated Deep Learning course with GPU by IBM, you will learn how to use accelerated hardware to overcome the scalability problem in Deep Learning. The course will begin with a quick review of Deep Learning, how to accelerate a Deep Learning model. It will then progress to Deep Learning in the Cloud and distributed Deep Learning.



Certificates



Upon completion of this Dual Master's Program in Data Science and Artificial Intelligence, you will receive the certificates from IBM and Simplilearn in the Dual Master's courses in the learning path.

These certificates will testify to your skills as an expert in Data Science and Artificial Intelligence.

Certificates



Advisory board member



Ronald Van Loon

[Big Data Expert, Director Adversitement](#)

Named by Onalytica as one of the 3 most influential people in Big Data, Ronald is an author for a number of leading Big Data and Data Science websites, including Dataflog, Data Science Central, and The Guardian. He is also a renowned speaker at industry events.



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