



Data scientist

LEARNING • PLAN

Objectives

- Accelerate your career in one of the hottest fields – data science. Learn data science fundamentals, key data science tools, and widely-used programming languages from industry and academic experts in this unique program created by Microsoft.
- Built in collaboration with leading universities and employers, the Microsoft Professional Program Certificate in Data Science will develop the analytical and programming skills you need to take advantage of the 1.5 million career opportunities available now in data science.

Technologies
you will use to
gain your skills

T-SQL

Microsoft
Excel

Power BI

Python

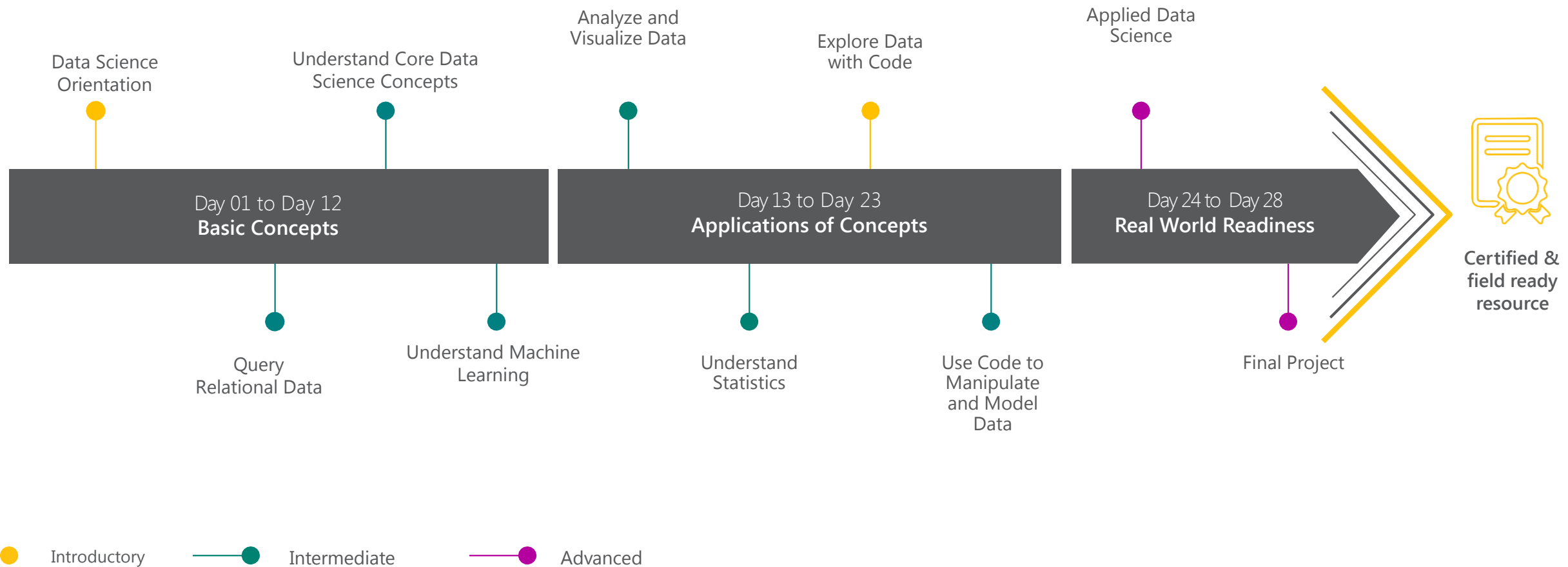
R





















Azure
Machine
Learning

HDInsight

Spark

Data Scientist Learning Plan



Module	Course Name	Learning Outcome	Days	
Day 1 to Day 12	Data Science Orientation	Microsoft Professional Orientation : Data Science  	<ul style="list-style-type: none"> •How the Microsoft Data Science curriculum works, •How to navigate the curriculum and plan your course schedule, •Basic data exploration and visualization techniques in Microsoft Excel, •Foundational statistics that can be used to analyze data 	3
	Query Relational Data	Querying Data with Transact-SQL  	<ul style="list-style-type: none"> •Create Transact-SQL SELECT queries, •Work with data types and NULL, •Query multiple tables with JOIN, •Explore set operators, •Use functions and aggregate data, •Work with subqueries and APPLY, •Use table expressions, •Group sets and pivot data, •Modify data, •Program with Transact-SQL, •Implement error handling and transactions 	3
	Understand Core Data Science Concepts	Data Science Essentials  	<ul style="list-style-type: none"> •Explore the data science process, •Probability and statistics in data science, •Data exploration and visualization, •Data ingestion, cleansing, and transformation, •Introduction to machine learning, •The hands-on elements of this course leverage a combination of R, Python, and Microsoft Azure Machine Learning 	3
	Understand Machine Learning	Principles of Machine Learning  	<ul style="list-style-type: none"> •Explore classification, •Regression in machine learning, •How to improve supervised models, •Details on non-linear modeling, •Clustering, •Recommender systems, •The hands-on elements of this course leverage a combination of R, Python, and Microsoft Azure Machine Learning 	3
Day 13 to Day 23	Analyze and Visualize Data	Analyzing and Visualizing Data with Excel  	<ul style="list-style-type: none"> •Gather and transform data from multiple sources, •Discover and combine data in mashups, •Learn about data model creation, •Explore, analyze, and visualize data 	3
	Understand Statistics	Essential Statistics for Data Analysis using Excel  	<ul style="list-style-type: none"> •Descriptive statistics, •Basic probability, •Random variables, •Sampling and confidence intervals, •Hypothesis testing 	3
	Explore Data with Code	Introduction to R for Data Science  	<ul style="list-style-type: none"> •Introductory R language fundamentals and basic syntax, •What R is and how it's used to perform data analysis, •Become familiar with the major R data structures, •Create your own visualizations using R 	2
	Use Code to Manipulate and Model Data	Programming with R for Data Science  	<ul style="list-style-type: none"> •Explore R language fundamentals, including basic syntax, variables, and types, •How to create functions and use control flow, •Details on reading and writing data in R, •Work with data in R, •Create and customize visualizations using ggplot2, •Perform predictive analytics using R 	3
Day 24 to Day 28	Applied Data Science	Applied Machine Learning  	<ul style="list-style-type: none"> •Explore analysis of time series and forecasting, •Take a look at spatial data analysis, •Learn about text analytics, •Review analysis of images 	3
	Final Project	Microsoft Professional Capstone : Data Science  		2

Skill Level



Introductory



Intermediate



Advanced

Mode of Learning



Online



Custom Instructor-led training



Hands on learning

Content Format



Video



Reading Material

Questions?
Need more information?
Email : info@excelenciaus.com

Thank You
