



# Data Science



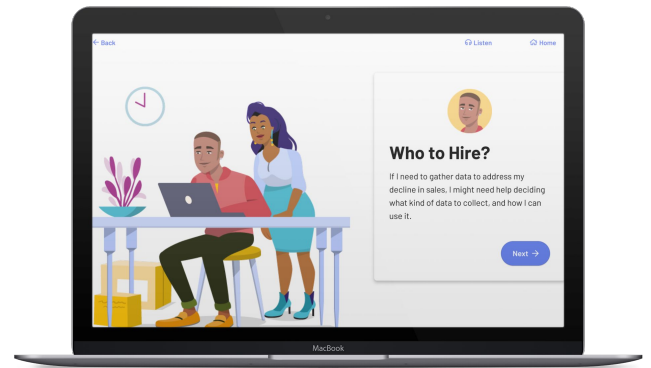
## FREE DIGITAL LESSONS

Data science is a career field poised for massive growth. According to the [U.S. Bureau of Labor Statistics](#), “Employment of computer and information research scientists is projected to grow 15 percent from 2019 to 2029, much faster than the average for all occupations. Job prospects are expected to be excellent.” The labor market is hungry for skilled data wranglers, and pays them well, but few schools offer data-science classes.

**Data Science** and the additional data science exploration labs are designed to empower students with knowledge about the fundamentals of data science, its currency in the job market, and its applicability to everyday life.

### THE LEARNING EXPERIENCE

- Immersive, scenario-based narrative with diverse environments and characters
- Learning through problem solving to ignite higher order thinking skills
- Detailed score reports and offline extension activities help teachers maximize their impact across all students.



Lesson 1: Data Science Basics

**Grade Level:** 9th - 12th

**Total Lessons:** 2 courses with a total of 6 lessons, 2.5 total hours

**Curriculum Fit:** Economics, Mathematics, Statistics, College & Career Prep

**Standards Alignment:** Common Core National Standards in Statistics & Probability

**Languages:** English, Spanish

PRE-SURVEY

**LESSON 1**  
What is Data Science?

**LESSON 2**  
Collecting, Cleaning, and Validating Data

**LESSON 3**  
Analyzing and Visualizing Data

**LESSON 4**  
Reporting and Acting on Data

POST-SURVEY

EACH LESSON HAS A PRE- AND POST-ASSESSMENT WITH REAL-TIME SCORE REPORTING

**Data Science is a blend of statistics and computer science, designed to help students build critical thinking skills to understand and use the “big data” that shapes modern life.**

## DATA SCIENCE FOUNDATIONS LESSONS

### 1. What is Data Science? - 30 min

*Real-world problems a data scientist might need to solve, and the methods they use.*

**Mini-lab:** Help Malachi boost his clothing company's sales.

### 2. Collecting, Cleaning, and Validating Data - 30 min

*How data scientists ensure that their data is accurate and reliable.*

**Mini-lab:** Study CordiQ's new user data to gain insights about their customers.

### 3. Analyzing and Visualizing Data - 30 min

*Use various displays and analytics tools to understand data sets.*

**Mini-lab:** Assist Arun in performing statistical analysis on his data to optimize the performance of a soccer team.

### 4. Reporting and Acting on Data - 30 min

*Summarizing data for different audiences in order to inform business decisions.*

**Mini-lab:** Use probability and statistics to help PlanetPlan choose their next conservation project.

## DATA SCIENCE EXPLORATION

The Data Science Exploration lessons will focus on data science careers within the financial industry. Lessons include:

### 1. Data Science in the Banking Industry - 8 min

*Brief review of Data Science Foundations and an introduction to the use of data science in the financial industry.*

### 2. Banking Fraud Simulation - 15 min

*Interactive simulation allowing learners to practice and apply data science concepts to detect and prevent fraud in the banking industry.*

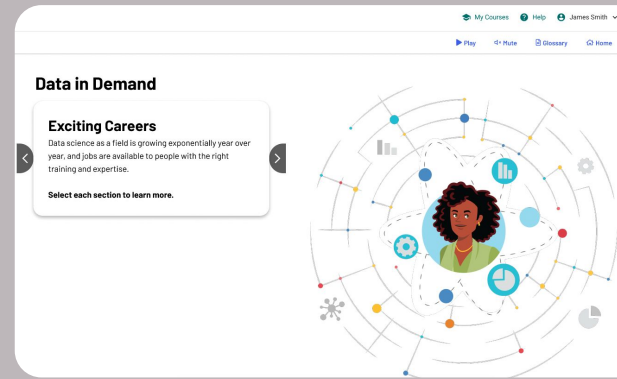
### 3. Financial Wellness Simulation - 15 min

*Interactive lab allowing learners to practice and apply data science concepts to identify financial wellness solutions for common issues faced by young adults.*

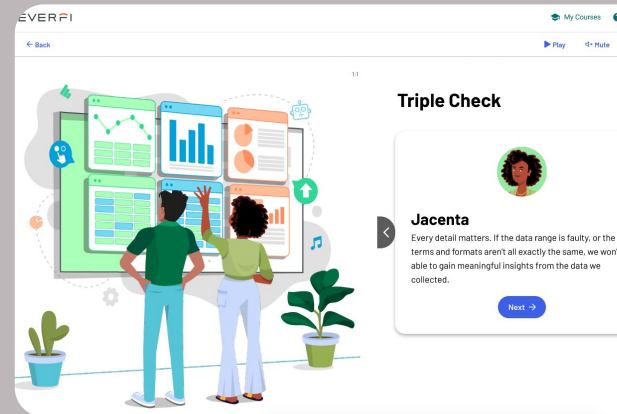
**Ready to Start? Register now at  
[EVERFI.COM/NewTeacher](http://EVERFI.COM/NewTeacher)**

## LESSON ACTIVITIES:

### Exploring Data Science Careers



### Collecting, Cleaning & Validating Data



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