Welcome
We will start promptly at 11 AM ET

Please add your questions to the chat box, we will address them during the Q&A. If you are unable to hear speakers just let us know in the chat box.

Following the webinar, you will receive a link to the recording. You can find a copy of all our webinar recordings at

www.caia.org/caia-infoseries
www.fdpinstitute.org/webinars
FDP Credential Information Session
Q2–2023 Exam
April 10 – 24, 2023

Kathryn Wilkens, PhD, CAIA
Founder
Pearl Quest LLC

Kim Durand
Project & General Operations Manager
FDP Institute

www.FDPInstitute.org
Financial Data Professional Institute

FDP Institute provides world class training and education to financial professionals to meet the accelerating needs of digital transformation in the industry.

FDP Credential Information Session Q2-2023 Exam
The FDP Institute

The FDP Charter

The FDP Institute offers a self-study program that provides financial data professionals an efficient path to learn the essential aspects of financial data science.

The Global Designation for Finance Professionals in a Data-Driven Industry

Financial Data Professional Institute℠ was created to

- Provide financial professionals with the knowledge necessary to succeed in an industry disrupted by the advent of big data and machine learning.
- Advocate for the highest levels of professional ethics and standards.
- Establish the FDP Charter as a global professional designation in the area of financial data science.

ONE COMPREHENSIVE EXAM
Offered twice per year. (Q2 & Q4)

TWO ONLINE CLASSES
Choose either Python or R, www.fdpinstitute.org/onlineclasses

EARN YOUR FDP DESIGNATION
A globally-recognized charter is awarded to FDP Charter holders.

VALUE ADD
Employers increasingly seek to find professionals who have the skills to apply data science tools to solve their most challenging problems.
The FDP Institute offers a self-study program that provides financial data professionals an efficient path to learn the essential aspects of financial data science.

**TOPICS COVERED INCLUDE:**
1. Introduction to Data Science
2. Linear & Logistic Regression, Support Vector Machines, Regularization and Time Series
3. Decision Trees, Supervised Segmentation and Ensemble Methods
4. Classification, Clustering and Naïve Bayes
5. Neural Networks and Reinforcement Learning
7. Text Mining
8. Ethical & Privacy Issues
9. Fintech Applications

**REGISTRATION & FEES – FDP EXAM CYCLE**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDP Exam Test Center</td>
<td>April 10 – 23, 2023</td>
<td>US$ 400</td>
</tr>
<tr>
<td>FDP Exam Remote Proctor</td>
<td>April 23 – 24, 2023</td>
<td>US$ 1150</td>
</tr>
<tr>
<td>FDP Early Exam Registration*</td>
<td>December 7 – February 1, 2023</td>
<td>US$ 950</td>
</tr>
<tr>
<td>FDP Exam Registration*</td>
<td>February 2 – March 13, 2023</td>
<td>US$ 1150</td>
</tr>
</tbody>
</table>

*CAIA Members are eligible for a 20% discount on the FDP registration fee. Learn more about Association Partnerships: [https://fdpinstitute.org/Association-Partners](https://fdpinstitute.org/Association-Partners)
Agenda

- Welcome
- About the FDP Institute
- The FDP Community
- The FDP Program
  - Do You Have the Background?
  - Outline of Curriculum
- Test Preparation
  - Reading Materials & Study Tools
- Steps to Obtain Your FDP Charter
- Q&A
Who We Are:
About FDP Institute

The Voice of Data Science in Finance
The FDP Institute Operates at the Nexus of Finance, Technology and Practical Application
The Market Need

+ The fundamental nature of many finance jobs (front, back and middle office) is becoming much more technology intensive.

+ There is a huge skills gap in finance, at all levels of the organization, between those possessed by current employees and those needed by employees in the industry 5 years from now.

+ The top 3 job roles in increasing demand across industries:
  1. Data Analysts & Scientists
  2. AI & Machine Learning Specialists
  3. Big Data Specialists
Mission and Goals

- **The FDP Institute’s Mission:**
  - To provide financial professionals with the knowledge necessary to succeed in an industry disrupted by the advent of big data and machine learning.
  - To advocate for the highest levels of professional ethics and standards.
  - To establish the FDP Charter as the global professional designation in the area of financial data science.

- **The FDP Institute’s Approach:**
  - Create a program of study that focuses on core concepts of data science and its applications in the financial industry.
  - Support FDP Charterholders’ efforts to continuously expand their knowledge of concepts and tools that enable them to stand out in their profession.
  - Support FDP Charterholders’ efforts to build a professional network.
Advisory Board Member Organizations

- **Julia Bonafede**, Co-Founder, Rosetta Analytics Advanced AI Asset Management
- **Jane Buchan**, Ph.D., CAIA, CEO, Martlet Asset Management
- **Mike Chen**, Ph.D., Head of Sustainable Investment, PanAgora Asset Management
- **Carlos A. Ferreira**, CFA, MBA, Founder & Managing Director, Capital Governance Partners LLC
- **Peter D. Gerlings**, CFA, CAIA, Founder, Vreeland Analytics
- **Tony Guida**, Executive Director, Co-Head Systematic Macro, RAM Active Investments
- **Nicolaus Henke**, Sr. Partner Emeritus, McKinsey & Company
- **Apurv Jain**, CEO & Co-Founder, MacroXStudio
- **Kathryn Kaminski**, Ph.D., CAIA, Chief Research Strategist, AlphaSimplex Group
- **Ganesh Mani**, PhD, Adjunct Faculty, CMU, Entrepreneur & Investment Manager
- **Bertrand Mouton**, Technology Investment Manager, CalPERS Investment Servicing
- **Miquel Noguer i Alonso**, Ph.D., ARPM, Co-Founder, Artificial Intelligence Finance Institute
- **Nigel Noyes**, Director, Enterprise Data Science, Rocket Companies
- **Lisa Schirf**, Managing Director & Global Head of Data Strategy, Tradeweb
- **Joseph Simonian**, Ph.D., Founder & CIO, Autonomous Investment Technologies LLC
- **Michael Oliver Weinberg**, Adjunct Professor, Columbia Business School
FDP Charterholders

✓ Have the **skills** needed to assess opportunities that Machine Learning and Artificial Intelligence bring to their organizations.

✓ Have the **knowledge** to evaluate financial products and support sound, data-driven investment strategies.

✓ Are **TRANSLATORS**!
  ✓ can effectively serve as a conduit between various stakeholders.
  ✓ Serve as strategic members of a data science team within their organizations.
FDP Charterholder Representation

**Titles**

Senior Manager Analyst Portfolio Data

**Industries**

Finance Asset Management Data Science

**Insight**

Academic Insurance Provider NFP Media

**Finance**

Public Banking Service Data Management

**Asset Management**

Data Science Finance NFP Investment
16 Industry Leading Advisory Board Members
315 Global Firms Represented
41 Countries Represented
7 Exam Cycles Completed
“Employers increasingly seek professionals, who have the skills to apply data science tools to solve their most challenging problems.”
The FDP Program

Validates your Financial Acumen & Data Analysis Skills
Are you ready?

Experience in the financial industry

• Asset management; Insurance; Banking; Consulting; Accounting

Background assumed by the FDP program

• *Financial Markets and Instruments*: Undergraduate or graduate degree in finance or economics, CAIA, CFA or FRM.

• *Mathematics & Statistics*: Undergraduate courses (basic algebra, calculus, probability and statistics), CAIA, CFA, or FRM.

• *Computer coding*: No coding questions on the exam.
  
  • Designated introductory online classes covering either *R* or *Python* must be completed. Can be taken after the exam.
Core Topics

• Learn important ML algorithms:
  ▪ Supervised models:
    ▪ Information-based learning (e.g., decision trees and random forest)
    ▪ Similarity-based learning (e.g., Nearest Neighbor algorithm)
    ▪ Probability-based learning (e.g., Naïve Bayesian)
    ▪ Error-Based learning (e.g., regression and LASSO)
    ▪ Deep Learning (e.g., artificial neural networks)
  ▪ Unsupervised models:
    ▪ Clustering (e.g., K-means algorithm)
▪ Apply ML algorithms: E.g., textual analysis
▪ Apply ethical standards:
  ▪ Regulations; privacy; biases; transparency.
Finance Applications

• Institutional investors’ Use of Alternative Data Sets.
• Fairness Measures for Machine Learning in Finance.
• Classification, Clustering and Network Analysis of NFTs.
• Decentralized Finance.
• Textual Analysis Applications in Insurance.
• Bias and Ethical Implications of Machine Learning.
• Financial Stability Implications of AI and ML.
• Alternative Data Usage in Private Equity.
• Evaluating Trading Strategies.
• Investable and Interpretable Machine Learning for Equities.
## Curriculum Topics

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>Approx Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction to Data Science</td>
<td>5–12</td>
</tr>
<tr>
<td>2. Linear &amp; Logistic Regression, Support Vector Machines, Regularization, and Time Series</td>
<td>10–15</td>
</tr>
<tr>
<td>3. Decision Trees, Supervised Segmentation, and Ensemble Methods</td>
<td>10–15</td>
</tr>
<tr>
<td>4. Classification, Clustering, and Naïve Bayes</td>
<td>5–12</td>
</tr>
<tr>
<td>5. Neural Networks and Reinforcement Learning</td>
<td>5–12</td>
</tr>
<tr>
<td>7. Text Mining</td>
<td>5–12</td>
</tr>
<tr>
<td>8. Ethical &amp; Privacy Issues</td>
<td>5–12</td>
</tr>
<tr>
<td>9. Fintech Applications</td>
<td>25–40</td>
</tr>
</tbody>
</table>
Exam Structure

- **FDP Exam:**
  - One online exam; four hours.
  - **80 Multiple Choice Questions:** 75% of total points (135 minutes)
  - **2–4 Constructed Response Questions:** 25% of total points (65 minutes)

- Download the free Study Guide: All exam questions are directly tied to *Learning Objectives* listed in the Study Guide.
- Download the free curriculum readings: Most of the readings are available free of charge through authors’ websites.
- Review the *pages assigned* in the Study Guide. *Not everything is covered on the exam.*
TOPIC 1: Introduction to Data Science


LEARNING OBJECTIVE 1

LEARNING OBJECTIVE 2

READING 2

Keywords:
- Data mining (p. 2)
- Data Science (p. 2)
- Data-driven decision making (p. 5)
- Big data (p. 8)
- Classification (p. 20)
- Co-occurrence grouping (p. 21)
- Profiling (p. 22)
- Link prediction (p. 22)
- Data reduction (p. 22)
- Causal modeling (p. 23)

Learning Objectives:

1.1.1 Data Analytic Thinking (Ch. 1)
   For example:
   A. List examples of data mining in finance, marketing, and customer relationship management.
   B. Contrast data science with data mining.
   C. Describe the two types of decisions that can benefit from data-driven decision making.

1.1.2 Business Problems and Data Science Solutions (Ch. 2)
   For example:
   A. Describe when each type of data mining algorithm, such as classification, regression, similarity matching, clustering, co-occurrence grouping, profiling, link-prediction, data reduction, and causal modeling, should be used.
   B. Explain the differences between regression and classification.
   C. Contrast supervised learning with unsupervised learning.

Action words: Specific Definitions Appear in Study Guide
Test Preparation

Relevant & Practical Industry and Academic Research Materials
Alternative Data and Machine Learning in the Financial Industry
6 required readings

Topics in Financial Data Science
9 required readings

3 required books
- Machine Learning in Business
- Data Science for Business
- An Introduction to Statistical Learning*
  *Only about 20% of this book is used in FDP curriculum

Exam Registrants can look for best available price.
Exam Registration & Fees

Q2–2023 FDP Exam: April 10 – 24, 2023
Registration

<table>
<thead>
<tr>
<th>Early Registration Opens</th>
<th>Early Registration Closes</th>
<th>Registration Closes</th>
<th>Exam Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 7, 2022</td>
<td>February 1, 2023</td>
<td>March 13, 2023</td>
<td>April 10 – 24, 2023</td>
</tr>
</tbody>
</table>

Testing at a Prometric Test Center: April 10–23, 2023
Remote Proctor Testing exam dates: April 23 & April 24, 2023

Q4–2023 FDP Exam: October 9 – 23, 2023
Registration

<table>
<thead>
<tr>
<th>Early Registration Opens</th>
<th>Early Registration Closes</th>
<th>Registration Closes</th>
<th>Exam Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1, 2023</td>
<td>July 26, 2023</td>
<td>September 11, 2023</td>
<td>October 9 – 23, 2023</td>
</tr>
</tbody>
</table>

Testing at a Prometric Test Center: October 9–22, 2023
Remote Proctor Testing exam dates: October 22 & October 23, 2023

Exam Fees

<table>
<thead>
<tr>
<th></th>
<th>Early Registration</th>
<th>Standard Registration</th>
<th>Retake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Fee (refund policy)</td>
<td>$160</td>
<td>$1850</td>
<td>$480</td>
</tr>
<tr>
<td>Enrollment Fee (non refundable)</td>
<td>$400</td>
<td>$400</td>
<td></td>
</tr>
<tr>
<td>Total FDP Exam Fee</td>
<td>$1050**</td>
<td>$1850**</td>
<td>$480**</td>
</tr>
</tbody>
</table>

* Exam fees do not include the cost of reading materials. We strongly recommend that candidates act early to obtain the readings in order to allow enough study time.

** Canadian taxes will be applied

Learn more about our Association Partnerships at https://fdpinstitute.org/Association-Partners
As the global financial industry becomes increasingly competitive, the professionals who succeed are the ones who can demonstrate their ability to add value to an organization.
Study & Preparation Tools

FDP Institute offers resources to help prepare for the exam:
1. **Candidate Handbook** – information on how to navigate through the curriculum.
2. **Study Guide** – facilitates quick learning and easy retention of curriculum materials.
3. **Practice Questions** – intended to familiarize yourself with the types of questions.
4. **Sample Exam** – replicates the structure of the actual exam.

For those taking the remote test option, we highly recommend taking the Demo Exam after completing the exercises above.
- Set up like a ream exam.
- Familiarize yourself with login and security procedures.
Prep Course

Kaplan Schweser provides an independent OnDemand review course, which is delivered 100% online.

With the **Review Package**, you’ll get access to:

- 10+ hours of **OnDemand review** sessions led by an expert in the finance and data science industries
- **Topic Quizzes** to assess your knowledge as you study each topic area
- An online **Mock Exam** to test your mastery of the FDP curriculum

For details and registration: [https://www.schweser.com/fdp](https://www.schweser.com/fdp)

*K Kaplan is an independent provider and not affiliated with CAIA or FDP. The FDP Study Guide is the only approved Study Guide. Prep course is not included in registration fee.*
Steps to Obtain Your FDP Charter

Candidate Checklist

✓ Register for the FDP Exam
✓ Obtain the Curriculum
✓ Reserve Your Exam Seat
  ✓ Option 1 – Test Center – please contact us at info@fdpinstitute.org if you do not see availability on the date needed.
  ✓ Option 2 – Online Proctoring
✓ Complete Online Course Requirements
Webinars for FDP Candidates

- FDP Info Session: January 11, 2023 @ 11 AM ET
- Road map of learning journey & expectations
- Testing options: Jan 25 @ 11 AM ET
- Get ready for YOUR exam day! March 1 @ 11 AM ET

Other webinars www.fdpinstitute.org/webinars
Q & A

FDP Review of Prometric Test Center and ProProctor Remote Testing for the Q2-2023 Exam

**Date:** January 25, 2023 @ 11 AM ET

How is ESG Reshaping the Alternative Investment Business?

**Date:** February 15, 2023 @ 10 AM ET

FDP Q2-2023 Candidate Orientation Session

**Date:** March 1, 2023 @ 11 AM ET