# DATA ANALYTICS IN R CERTIFICATE

## **Program Description**

R is now considered one of the most popular analytics tools in the world. In this certificate program you will develop the skill set necessary to perform key aspects of data science efficiently. The courses cover the application of core analytics concepts in the R programming environment to allow a scalable implementation.

You'll learn techniques for manipulating and visualizing data, describing data through descriptive statistics, and clustering. You'll extend these basic reporting approaches through classification and predictive analytics using traditional parametric models (regression and logistic regression) as well as machine learning techniques. In addition, you'll develop linear, nonlinear, and Monte Carlo decision-making models that will allow you to make more informed decisions.

To be successful in this program, it is recommended that students have a background in predictive and prescriptive data analytics, specifically with optimization, modeling, and Monte Carlo simulations, in addition to a familiarity with programming syntax.

### **Key Takeaways**

- Understand, model and visualize data using R
- Make predictions for qualitative and quantitative dependent variables using R
- Efficiently use the full breadth of parametric and non-parametric predictive data models in R
- Develop models to make complex, large-scale decisions through the use of mathematical approximations such as optimization (linear, nonlinear, dynamic programming) and Monte Carlo simulations using R

#### **What You'll Earn**

- Data Analytics in R Certificate from Cornell SC Johnson College of Business
- 72 Professional Development Hours (7.2 CEUs)

#### **Who Should Enroll**

- · Analysts
- · Developers
- · Data scientists
- · Functional managers
- · Consultants
- · Any professional that uses data to make business decisions

#### **Total Investment**

3 months to complete all the courses

#### **How To Enroll**

For more information on how to enroll, please visit Data Analytics in R Certificate (https://ecornell.cornell.edu/certificates/data-science-analytics/data-analytics-in-r/).

#### Courses

Code	Title	Hours
ECORNELL SHA576		Non- credit.
ECORNELL	SHA57	Non- credit.
ECORNELL	SHA578	Non- credit