

# Program Modules

## **Orientation Module: Introduction to Business Analytics**

### **Module 1: Descriptive Analytics: Gathering Insights**

Identify effective methods for collecting data on customer behavior and use it to make better decisions for your business.

### **Module 2: Descriptive Analytics: Describing and Forecasting Future Events**

Learn how to use historical data such as trends and consumption patterns to estimate forecasts for the future.

### **Module 3: Predictive Analytics: Making Predictions Using Data**

Choose the right tool for decision-making to create future business strategies and determine the kinds of predictions you can make to create future strategies.

### **Module 4: Predictive and Prescriptive Analytics: Application and Toolkit**

Apply optimization models to specific business challenges with low uncertainty and determine the most favorable outcome for your business.

### **Module 5: Predictive Analytics: Tools for Decision Making**

Interpret and visualize the results of simulation models to evaluate complex business decisions in uncertain settings.

### **Module 6: Predictive Analytics: Using Data to Predict Employee Performance**

Use data analytics to derive insights into the key components of the staffing cycle for your business — hiring, internal mobility, and attrition.

### **Module 7: Prescriptive Analytics: Providing Recommendations to Change Behavior**

Write prescriptions for data-driven decision-making for your organization using optimization models.

### **Module 8: Prescriptive Analytics: Determining the Most Favorable Outcomes**

Determine the most favorable outcome for a business decision using decision trees in conjunction with optimization and simulation.

### **Module 9: Application of Analytics for Business**

Explain important components of different use cases of analytics in business and create a plan to put data to work in your organization.