

Data Analyst Competencies

Required Competencies

Data Analysis

Acquires, organizes, and interprets data from various data sources.

Programming for Data Analysis

Uses programming languages such as SQL or Microsoft Excel to produce data output.

Data Visualization

Translates data into basic visualizations to support business analytics and problem solving. Data Visualization tools may include Tableau, Power BI, Salesforce, Looker.

Inquiry-Driven Solutions

Identifies key business challenges and performs preliminary data collection and root cause analysis to recommend and implement solutions.

Customer Service

Responds to customer requests for support such as answering business or technical questions, or generating reports.

Troubleshooting

In a technical setting, performs problem resolution and root cause analysis and recommends and implements solutions.

Communicates Data Insights

Tells and adapts a story from the results of a model through a clear, concise explanation in a verbal or written method, that is uniquely framed to the intended audience.

Business Acumen

Uses understanding of organization's priorities, financial model, and operations to guide daily work.

Optional Competencies:

Problem Formulation

Identifies opportunities to improve processes through use of predictive analytics. Effectively frames and states the problem and how data science may add value.

Data Acquisition

Demonstrates ability to identify relevant data for a business use case and acquire it for analysis and modeling activities.

Exploratory Data Analysis

Uses a notebook to summarize and describe a data set. Looks for patterns, missing values, and anomalies. Identifies appropriate remediation to prepare data set for model building.

Statistics and Probability

Uses basic statistics and probability to perform job functions.

Model Building

Selects and builds a variety of predictive models to perform job functions and support business goals.

Programming Language

Uses a programming language such as Python or R to facilitate data science processes.

Prerequisites: Must have completed Statistics or Calculus *plus* Introduction to Computer Science by the end of year 2.

Certifications that Support:

Summer between years 1 and 2: Python Training

Summer between years 2 and 3: IBM Data Science Certification

Note: Version 1 of this rubric has been developed by the team at Pinnacol Assurance.