SOURCE: Wilbur W Stanton & Angela A Stanton (2020). Helping Business Students Acquire the Skills Needed for a Career in Analytics: A Comprehensive Industry Assessment of Entry-Level Requirements. Decision Sciences Journal of Innovative Education. Volume 18, Issue1. Retrieved from: https://onlinelibrary-wiley com.ez.lib.jjay.cuny.edu/share/N9Y2QSCNFDAFZ3J6YUCB?target=10.1111/dsji.12199

APPENDIX A

TICS AND DATA SCIENCE JOB ADS

282 DESCRIPTIONS FOUND IN ANALY
Hard Skills
A/B testing
Ability to analyze
Advanced analytics
Advertising experience
AI (artificial intelligence)
Algorithms
Analysis of variance
Analytical skills
Behavioral analytics
Big data
Brand management
Budgeting
Business intelligence
Business metrics
Business performance management
Business policy
Business strategy
Calculus
Causal modeling
Channels of distribution
Churn analysis

Coding
Competitive analysis
Computer science
Conjoint analysis
Consulting ability
Core competencies
Corporate governance
Corporate strategy
Correlation
Cost analysis
Credit analytics
CRM
Customer satisfaction
Cyber analytics
Cyber security
Dashboards
Data analysis
Data architecture
Data governance
Data guru
Data informed
Data mining
Data processing
Data query
Data science
Data transformation
Data visualization
Data warehouses
Database development

Decision analytics
Decision science
Decision trees
Deep learning
Descriptive analytics
Descriptive statistics
Digital analytics
Digital marketing
Digital strategy
Econometric forecasting
Econometrics
Economic forecasting
Enterprise optimization
Enterprise systems
Environmental scanning
Experience with relational databases
Experience with statistical software
Factor or principal co-mponents analysis
Financial analytics
Financial modeling
Financial services analytics
Financial strategy
Fluent in Spanish
Fraud analytics
Google Analytics
Healthcare analytics
HR analytics
Industry analysis
Information science

Information technology International experience Internet marketing IT strategy K-means/clustering KPI Lifetime value Linear optimization Linear programming Location analytics Logistic regression Machine learning Macroeconomics Management science Market basket analysis Market research Marketing metrics Marketing research Marketing strategy Mathematics Matrix algebra Microeconomics Microsoft Excel Modeling Multivariate statistics **Network analytics Neural networks** New product development

Nonparametric

Optimization	
Optimization modeling	
Pivot tables	
Powerpivot	
Predictive analytics	
Predictive modeling	
Prescriptive analytics	
Pricing analytics	
Process management	
Product positioning	
Production manageme	nt
Programming	
Promotion	
Qualitative analysis	
Quantitative analysis	
Quantitative skills	
Querying	
Real estate analytics	
Regression	
Retail analytics	
Retail sales analytics	
Sales forecasting	
Sales management	
Segmentation	
Simulations	
Social Media	

OLAP

Operations management

Operations research

Social media analytics Sports analytics Statistical modeling Statistics (ability/skills) Strategic decisions Strategic planning Supervised learning Supply chain experience **SWOT** Talent analytics Target marketing Technical writing Text analytics Text mining Transactional analysis Transactional data Transportation analytics Unstructured data Unsupervised machine learning vector modeling V-Lookup Web Analytics Soft skills Ability to work independently Ability to work on teams Adaptable Analytical reasoning skills Bring insights Business acumen

Conceptual thinking
Creativity
Critical listening
Critical thinking
Cross-functional
Curiosity
Data driven
Detailed oriented
Entrepreneurial
Ethical
Goal oriented
Innovative
Inquisitive
Interpersonal skills
Leadership
Oral communication skills
Presentation skills/abilities
Problem-solving skills
Provide business insights
Provide insight
Provide marketing insights
Statistically minded
Strategic thinker
Teamwork
Think strategically
Verbal communication skills
Work collaboratively
Work well with others

Complex problem solving

Written communi-cation skills

Credentials

1-3 Years experience

5+ Years experience

Bachelor's degree

BS/BA

CAP (certified analyt-ics professional)

Certifications

Co-op experience

Degree in accounting

Degree in accounting information sys

Degree in business

Degree in business intelligence

Degree in computer science

Degree in decision science

Degree in economics

Degree in engineering

Degree in finance

Degree in information science

Degree in information systems

Degree in information technology

Degree in management

Degree in management information sys

Degree in marketing

Degree in marketing research

Degree in mathematics

Degree in operations management

Degree in operations research

Degree in psychology

Degree in STEM
Doctorate
Master's degree
MBA
Microsoft certifications
PhD
Prior experience
Quantitative degree
Software/specific analytical skills
Alteryx
Apache Flink
Apache Hive
Apache PIG
Apache Spark
Apache Storm
AWS
Azure
C/C++
Caffe
Cognos
Dataiku
Experience in Microsoft products
Google AdWords
Hadoop
Hubspot
Java
JMP

Degree in quantitative methods

Degree in statistics

Looker
Matlab
Matlab
Microsoft Access
Microsoft Excel
Microsoft Word
Microstrategy
Minitab
Oracle
Perl
PowerPoint
Python
Qlikview
R
RapidMiner
Redshift
Revolution
Salesforce CRM
SAP
SAS
SAS Enterprise Miner
Scala
Sisense
Splunk
SPSS
SPSS Modeler
SQL
Stata

Knime

Tableau

Tensoflow

Teradata

Thoughspot

Tibco