

Data Science for Business Professionals (DSBIZ)



ZETLAN TECHNOLOGIES
www.zetlantech.com

Online Course

Data Science for Business Professionals (DSBIZ)

Course Modules

Understand Data Science Fundamentals

1. Define data science terms and concepts.

- Data science
- Data analytics
- Descriptive analytics
 - Business intelligence
 - Data mining
 - Data visualization
 - Storytelling with data
 - Summary statistics
- Predictive analytics
 - Root cause modelling and analysis
 - Forecasting
 - Pattern identification
- Prescriptive analytics
 - Simulation
 - Optimization



Data Science for Business Professionals (DSBIZ)

- Diagnostic analytics
 - Root cause analysis
 - Identification of technical issues
- Statistical analysis
 - Sampling techniques
 - Distribution of data
 - Central tendency
 - Dispersion
 - Conditional probability
 - Computational statistical interference
 - Linear models
 - Bayesian models
- Artificial intelligence
 - Algorithms
 - Generative AI
- Machine Learning
 - Deep learning
- Programming tools
 - Python
 - R
 - SQL
 - NumPy and Pandas
 - Open source



ZETLAN TECHNOLOGIES

Data Science for Business Professionals (DSBIZ)

- APIs
- Web scraping
- Velocity of data
- Data types
 - Structured
 - Unstructured
- Big data

2. Describe the data science lifecycle.

- Discovery
 - Data acquisition
 - Sourcing
- Data preparation
 - Exploration
 - Profiling
 - Pre-processing
 - Cleansing
- Model planning
- Model building
 - Running
 - Testing
 - Revising
- Model implementation
- Communication of results



ZETLAN TECHNOLOGIES

Data Science for Business Professionals (DSBIZ)

Identify Business Uses for Data Science

3.Improve customer experience (CX).

- Personalized customer experience
- Sentiment analysis
- Recommender systems
- Self-service support
- Chatbots
- Virtual assistants

4.Improve marketing efforts.

- Audience segmentation
- Targeted advertising
- Campaign optimization
- Measurement analysis

5.Optimize organizational and transactional security.

- Fraud detection
- Minimize loan defaults
- Reduce intellectual property theft
- Identify and mitigate risks
- Cybersecurity



Data Science for Business Professionals (DSBIZ)

6. Enhance operational practices.

- Predict system or component failure
- Optimize sales forecasting
- Implement dynamic pricing
- Identify reasons for customer churn
- Optimize talent acquisition
- Optimize transportation and logistics

Implement Business Requirements for Data Science

7. Develop a data-centric organization.

- Prepare organizations for data science implementation
 - Define potential contribution of data science for the organization
 - Alignment of data science with corporate strategy
- Alignment of data science with organizational resources
- Alignment of data science with organizational culture
 - Design thinking
 - Critical thinking/objectivity
 - Accurately communicating results
 - Business acumen/data-driven decisions
 - Learning organization/professional development and upskilling
- Prepare teams for data science implementation
- Talent acquisition
- Training



Data Science for Business Professionals (DSBIZ)

8. Develop an implementation strategy.

- Identify business case for using data science
- Identify organizational investments to be made to implement data
- Identify factors related to data discovery
 - Collection of relevant data
 - Methods of collecting relevant data
 - Tools for generating data
 - Methods for storing data
 - Tools for storing data
 - Appending data
- Identify factors related to data preparation
 - Data wrangling/munging
 - Cleaning data
 - Tools for preparing data
 - Analyzing data
 - Tools for data analysis
- Identify factors related to modeling
 - ETL process
 - Model types
 - Model testing
 - Model revision
 - Evaluation of model results
 - Model implementation



Data Science for Business Professionals (DSBIZ)

For Enquiry: +91 8680961847

- EU GDPR
- PCI DSS
- OECD Privacy Guidelines
- APEC Cross-Border Privacy Rules (CBPR)
- Jurisdictional issues
 - US federal and state-level privacy legislation
 - EU legislation, frameworks, and regulations
 - Data privacy legislation in other countries
 - AI legislation



Zetlan Technologies

Free Advice: +91 9600579474

www.zetlantech.com

Data Science for Business Professionals (DSBIZ)

- Identify factors related to communicating model results
 - Document key findings
 - Create visual representation of insights
 - Develop reports and other assets for stakeholders
- Identify factors related to data visualization
 - Audience
 - Charts
 - Tables
 - Tools for data visualization

Identify Data Science Risks

9. Describe the impact of data science on business.

- Impact on overall business operations
 - Reputational impact
 - Talent gaps (expertise, training, and experience)
 - Legal and regulatory violations
- Impact on business processes
 - Cost
 - Infrastructure requirements
 - Employee impact
 - Organizational changes



Data Science for Business Professionals (DSBIZ)

- Data issues
 - Data security (breach and theft)
 - Low-quality data
 - Data privacy violations
 - Lack of data controls
- AI-related risks
 - Lack of formal governance for AI
 - Acquisition of third-party data and AI products
 - Lack of domain expertise in pre-production reviews
 - Use of black-box models and technologies

10. Identify governance measures.

- Ethical considerations
 - Privacy
 - Accountability
 - Transparency and explainability
 - Fairness and non-discrimination (bias)
 - Safety and security
- Legal and regulatory considerations, frameworks, and guidelines





**LEARN
REMOTELY!!**

The efficiency of online learning in terms of time management, flexibility, and the ability to access resources anytime, anywhere can be compelling.



ZETLAN TECHNOLOGIES
www.zetlantech.com

For contact: +91 8680961847
+91 9600579474

