Preparing for Professional Data Engineer Examination

Module 1: Understanding the Professional Data Engineer Certification

Establish basic knowledge about the certification exam and eliminate any confusion or misunderstandings about the process and nature of the exam itself.

Topics covered:

- Position the Professional Data Engineer certification among the offerings
- Distinguish between Associate and Professional
- Provide guidance between Professional Data Engineer and Associate Cloud Engineer
- Describe how the exam is administered and the exam rules
- Provide general advice about taking the exam

Module 2: Sample Case Studies for the Professional Data Engineer Exam

In-depth review of the Case Studies provided for exam preparation

Topics covered:

- Flowlogistic
- MJTelco

Module 3: Designing and Building (Review and preparation tips)

Tips and examples covering data processing systems design skills, data structures, and database skills that could be tested on the exam.

Topics covered:

- Designing data processing systems
- Designing flexible data representations
- Designing data pipelines
- Designing data processing infrastructure
- Build and maintain data structures and databases
- Building and maintaining flexible data representations
- Building and maintaining pipelines
- Building and maintaining processing infrastructure

Module 4: Analyzing and Modeling (Review and preparation tips)

Tips and examples covering data analysis, analysis and optimization of business processes, and machine learning skills that could be tested on the exam.

Topics covered:

- Analyze data and enable machine learning
- Analyzing data
- Machine learning
- Machine learning model deployment
- Model business processes for analysis and optimization
- Mapping business requirements to data representations
- Optimizing data representations, data infrastructure performance and cost

Module 5: Reliability, Policy, and Security (Review and preparation tips)

Tips and examples covering reliability, policies, security, and compliance skills that could be tested on the exam.

Topics covered:

- Design for reliability
- Performing quality control
- Assessing, troubleshooting, and improving data representation and data processing infrastructure
- Recovering data
- Visualize data and advocate policy
- Building (or selecting) data visualization and reporting tools
- Advocating policies and publishing data and reports
- Design for security and compliance
- Designing secure data infrastructure and processes
- Designing for legal compliance

Module 6: Resources and next steps

Resources for learning more about identified subjects that could be tested on the exam.

Topics covered:

- Resources for learning more about designing data processing systems, data structures, and databases
- Resources for learning more about data analysis, machine learning, business process analysis, and optimization
- Resources for learning more about data visualiztion and policy Resources for learning more about reliability design
- Resources for learning more about business process analysis and optimization
- Resources for learning more about reliability, policies, security, and compliance