

IoT Fundamentals: Big Data & Analytics (IoTBDA) Release Notes

Last updated August 22, 2018

Purpose

IoTBDA is the second release of the Cisco Networking Academy[®] Big Data & Analytics course. This course introduces a variety of topics to build students' skills and understanding of how data creates value in the business and public sector. The course also introduces the Data Analysis Lifecycle and the three types of data analytics: descriptive, predictive, and prescriptive. Students will use Jupyter Notebooks extensively to create a data pipeline to acquire, analyze, and visualize data. A Jupyter Notebook is a web application that allows students to be presented with content text, equations, visualizations, and to run live Python code within the same file. Click here to learn more about Jupyter Notebooks. Students will also apply machine learning models to train a computer to automate tasks. This course includes activities that expand on the course material. Upon completion of this course, the end-of-course survey, and the end-of-course assessment, the student will receive a Certificate of Completion. These notes provide detailed information about this release, including course content, known issues, certification exam alignment, and support information.

Release Content

Component	Description
E-Learning Content	6 chapters
Videos	9 videos
Activities	18 Jupyter Notebooks 11 Hands-on Lab activities 14 Interactive Activities
Additional Resources	Additional resources are included in the form of external links
Terms and Concepts Practice	6 Quizlets intended for self-evaluation of core terms and concepts from the chapter using flashcard format
Chapter Quizzes	6 modifiable chapter quizzes
End-of-Course Survey	1 end-of-course survey to provide feedback for the course. The EoC Survey contains a free-form question. Instructors will not be able to see the answers for this survey.
End-of-Course Assessment	1 end-of-course assessment that covers the content of the course
Accessibility	6 chapters containing accessible text and media text
Certificate of Completion	The successful completion of the end-of-course assessment and end-of-course survey are required for receiving the Certificate of Completion.

Known Issues

Item	Description
English Spelling	American-English spellings are interspersed in the text of the modules.
Closed Captions	Use the external video link if you are having issues with the embedded videos.
Quizlets	If students have trouble adjusting the audio options while in Flashcard mode in the Quizlet, select another study mode and then change the options. You can then go back to the flashcards.
End-of-Course Survey	The EoC Survey contains a free-form question. Instructors will not be able to see the answers for this question.

Course Outline

Chapter	Title
1	Data and the Internet of Things
2	Fundamentals of Data Analysis
3	Data Analysis
4	Advanced Data Analysis and Machine Learning
5	Storytelling with Data
6	Architecture for Big Data and Data Engineering

Certification Exam Alignment

Not Applicable

Support

For general assistance with curriculum, classroom, or program issues, please contact the Networking AcademyTM Support Desk by signing into the Cisco NetAcad learning <u>environment</u> and clicking **Help** > **Contact Support** at the top of the page.