Course description
This course presents the technical considerations of developing machine learning (ML) features on AWS. It describes how AWS Partner Network (APN) Partners can drive ML opportunities and build ML solutions delivery practices. Upon successful completion of the course, you will have a foundational understanding of the machine learning feature development process. You will know about the machine learning services and tools available on AWS, and you will be able to implement machine learning features using these services and tools.

- Course level: Intermediate
- Duration: 1 day

Activities
This course includes classroom training, demonstrations, individual and group exercises, video

Course objectives
This course is designed to teach you how to:

- Engage customers in machine learning (ML) discussions and identify opportunities
- Identify key use cases for ML
- Describe the end-to-end ML process
- Explain the design process, requirements, and data dependencies
- Describe Amazon Machine Learning (Amazon ML) artificial intelligence (AI) services
- Create and deploy an Amazon ML model at scale using Amazon SageMaker
- Identify common ML questions and answers
- Learn about new ML Services
- Locate additional resources

Intended audience
This course is intended for:

- AWS Partner Network (APN) Partner developers
- Data scientists
- Technical account managers (TAMs)
- Machine learning practitioners
Prerequisites
We recommend that attendees of this course have the following prerequisites:

- Prior experience with RESTful APIs
- Some experience with Python
- Knowledge of machine learning terminology and concepts, including deep learning and frameworks, such as TensorFlow, PyTorch, or MXNet

Course outline
This course covers the following concepts:

- Introduction to machine learning
- The machine learning process
- Data collection, integration, preparation, visualization, and analysis
- AWS Deep Learning Amazon Machine Images (DLAMIs)
- Amazon SageMaker concepts
- Amazon SageMaker notebooks
- Amazon SageMaker built-in algorithms
- Amazon SageMaker inference, including debugging and monitoring
- Amazon SageMaker at the edge
- Machine learning AI services on AWS
- Next steps and additional learning