DevOpsSchool

Course curriculum · November 2026

ARTIFICIAL INTELLIGENCE · TRAINING PROGRAM

TensorFlow Training

A practical, hands-on TensorFlow Training curriculum: 115 topics. Learn live online in a small batch, as a private corporate batch, or self-paced with one year of LMS access.

LIVE ONLINE **Max 8-10 hours**	CORPORATE **Private team batch, on demand**	SELF-PACED VIDEO **1-year LMS access**
BATCH SIZE **Max 10 learners**	NEXT BATCHES **1st of every month · weekends: first Saturday**	CERTIFICATE **Verifiable certificate of completion**

INSIDE THIS CURRICULUM

Who should attend	Objectives, audience, prerequisites
Agenda	115 topics
Formats and fees	Live, 1:1, self-paced, corporate
Trainer and reviews	Rajesh Kumar
Enrolment	Batches, payment, contacts

WHY DEVOPSSCHOOL

- Rated 4.6 on Google
- 1,500+ verifiable certificates issued in the public registry
- Trainer Rajesh Kumar: 20 years in industry
- Small batches: max 10 learners, every session recorded

Course page: www.devopsschool.com/courses/ai/tensorflow.html
Talk to us: WhatsApp +91 99057 40781 · +1 (469) 756-6329 · contact@DevOpsSchool.com · reply within 1 hour

COURSE FIT

Who this program is for

Use this page to decide whether TensorFlow Training matches your role and experience.

1

Objectives

Understand the core concepts and usage model, apply practical workflows through examples and guided tasks, and prepare for implementation, certification or team adoption.

2

Who should attend

Developers, DevOps engineers, administrators, SREs, security engineers, platform teams, release teams, technical leads and corporate teams working with this topic.

3

Before you start

Basic computer literacy and awareness of software, operations, cloud, DevOps or security workflows is helpful. Deep programming experience is not needed unless the topic requires it.

AGENDA AT A GLANCE · 115 TOPICS

Core curriculum

115 topics · Introduction of Artificial Intelligence

AGENDA · 115 TOPICS

TensorFlow Training agenda

Live online batches run for max 8-10 hours; corporate batches are planned with your team.

CORE CURRICULUM — 115 topics

1. Introduction of Artificial Intelligence
2. Data Science & Python
3. Machine Learning
4. Deep Learning
5. Natural Language processing(NLP)
6. Decoding Artificial Intelligence
7. Fundamentals of Machine Learning and Deep Learning
8. Machine Learning Workflow
9. Performance Metrics
10. Introduction
11. Introduction to TensorFlow
12. Architecture of Tensorflow
13. Installation on Local Machine
14. Using TensorFlow in Google Colab
15. Working with Tensors and Operations
16. Keras Low level api
17. Labs:-
18. 1. Installing tensorflow on local machine 2. Working with google colab
19. Introduction to Artificial Neural Networks
20. a. From Biological to Artificial Neurons
21. b. Different activation functions
22. c. What is perceptron?
23. d. Multilayer perceptron and back propagation
24. e. Working with sequential api
25. f. Working with the functional api
26. g. Using callbacks
27. h. Tensorboard for visualization
28. i. Labs:-
29. 1. Classification on iris dataset using perceptron model
30. 2. Image classification on fashion MNIST dataset using sequential and functional API
31. 3. Improving the model using callbacks
32. Training Deep Neural Nets
33. a. Challenges of Deep Neural Networks’
34. b. Vanishing and Exploding gradients
35. c. Glorot and He Initialization
36. d. Non Saturating Activation Functions

37. e. Different activation functions effect on deep neural nets
38. f. Batch normalization
39. g. Reusing the pre-trained layers in Neural nets
40. h. Faster optimizers
41. i. L1 and L2 regularization
42. j. Dropouts and their purposes
43. k. Labs:- 1. Classification of MNIST dataset and performance of models by the use of
44. different activation functions.
45. 2. Classification by using a pre-trained layer of model to reduce the computation time.
46. 3. Reducing the overfitting through the use of regularization in various models.
47. Loading and preprocessing the data
48. a. The data api
49. b. Chaining transformations
50. c. Pre-processing the data
51. d. TFR record format and compressed files
52. e. Introduction to protocol buffer
53. f. Processing the Input features
54. g. TF transform
55. h. Tensorflow datasets project
56. i. Labs:- 1. Implementation of basic functions like repeat, batch, shuffle required for
57. preprocessing.
58. 2. Implement interleave() so as to read many files at a time using tensorflow for improving
59. the performance.
60. 3. Storing and accessing the files stored in tfrecord format for better processing.
61. Computer Vision using CNN
62. a. Inspiration to the CNN
63. b. Architecture of CNN
64. c. Convolution layers in CNN
65. d. Filters in CNN
66. e. Pooling layer in CNN
67. f. Depth pooling in CNN
68. g. Different architectures of CNN
69. h. Labs:- 1. Implementing different filters to find the different patterns from the image.
70. 2. Progressively reduce the spatial size of an image.
71. 3. Classifying the fashion MNIST dataset by using CNN.
72. Processing Sequences using RNN
73. a. Single neuron RNN
74. b. Working with RNN neural network
75. c. Input and Output Sequences in RNN
76. d. Introduction to Deep RNN
77. e. Forecasting using RNN

78. f. Unstable gradient problem
79. g. Architecture of LSTM
80. h. Architecture of GRU
81. i. Labs:- 1. Forecasting using simple RNN, Deep RNN, LSTM and GRU
82. Natural Language Processing
83. a. Introduction to Natural Language processing
84. b. Shakespear text generation using char RNN
85. c. Stateless and stateful RNN
86. d. Concept of sentiment analysis
87. e. Encoder and Decoder Network for Neural Machine Translation
88. f. Pre-processing required for encoder and decoder
89. g. Concept of Beam Search
90. h. Overview of attention mechanism
91. i. Labs:- 1. Generating Shakespearean text using character RNN, Bidirectional RNN.
92. 2. Sentiment analysis of IMDB dataset.
93. Representative Learning and Generative Learning using Autoencoders and GANs
94. a. Introduction to Autoencoders and GAN
95. b. Efficient data representation
96. c. Dimensionality reduction using autoencoders
97. d. Introduction to stacked autoencoders
98. e. Training one autoencoder at a time
99. f. Recurrent autoencoders
100. g. Sparse autoencoders
101. h. Generative adversarial networks
102. i. Deep Convolutional GANs
103. j. Labs:- 1. Autoencoder for the dimensionality reduction
104. 2. Reconstruction of images using recurrent auto encoder
105. Reinforcemnent Learning
106. a. Introduction to reinforcement learning
107. b. Learning to optimize rewards
108. c. Policy Search
109. d. Introduction to OpenAI Gym
110. e. Neural Network Policies
111. f. Credit Assignment Problem
112. g. Markov Decision Process
113. h. Q Learning
114. i. Deep Q Learning
115. j. Labs:- 1. Train a Deep Q network with TF agent(Cartpole Environment)

HOW YOU CAN LEARN

Formats and fees

The same agenda in four formats. Fees are in Indian rupees as of November 2026; the course page shows them in your currency.

FORMAT	DURATION	WHAT YOU GET	FEE
Live & interactive (online)	Max 8-10 hours	Instructor-led public batch of max 10 learners with demos, labs, Q&A and assignment review. Weekday batches start on the 1st of every month, weekend batches on the first Saturday of every month.	**INR 34,999**
1:1 live training (online)	Max 8-10 hours, one-to-one	The same agenda, taught one-to-one by the trainer. Starts immediately, without waiting for the next batch; sessions planned around your working hours, at your pace.	**INR 99,999**
Self-paced video	1-year LMS access	This program plus 20+ more courses and 50+ tools, at your own pace.	**INR 833/month** billed yearly at INR 9,996
Corporate	Planned with your team	A private batch for your team, on demand, with examples mapped to your platforms.	**Quote on request**

ASSESSMENT AND CERTIFICATE

Your progress is checked through hands-on tasks and assignments. On completion you receive a DevOpsSchool certificate of completion with a unique credential ID that anyone can verify at devopsschool.com/certificates.

INCLUDED WITH EVERY LIVE BATCH

- Every live session is recorded and stays in your LMS for a year.
- Can't attend your batch? Move to next month's batch.
- Free demo class before you pay.
- Free 10-15 minute call with an advisor or the trainer to check the course fits you.

YOUR TRAINER

Learn from Rajesh Kumar

Principal Architect, trainer and mentor in DevOps, SRE, DevSecOps and platform engineering, with 20 years across 8+ software MNCs, including Staff DevOps/SRE Engineer for a leading Japanese mobile-payment platform and Principal DevOps Architect and Manager in Europe.

Profile: www.rajeshkumar.xyz · Videos: youtube.com/@TheDevOpsSchool

20 years in industry	**200+** corporate trainings
10,000+ engineers mentored	**70+** organisations coached

REVIEWS

What learners say

Rated 4.6 on Google · more reviews at devopsschool.com/testimonials and in our video testimonials.

> “Rajesh is very good trainer. Rajesh was able to resolve our queries and question effectively. We really liked the hands-on examples covered during this training program.”
>
> Indrayani, India

> “The training was very useful and interactive. Rajesh helped develop the confidence of all.”
>
> Abhinav Gupta, Pune

START YOUR TRAINING

Join the next batch

Weekday batches start on the 1st of every month and weekend batches on the first Saturday of every month, with max 10 learners each. 1:1 training can start immediately; corporate batches run on demand. We reply within 1 hour.

Pay by UPI, credit and debit cards, net banking or PayPal. Before you pay, read our refund policy. All courses: www.devopsschool.com/courses/

ENROL OR RESERVE A SEAT
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