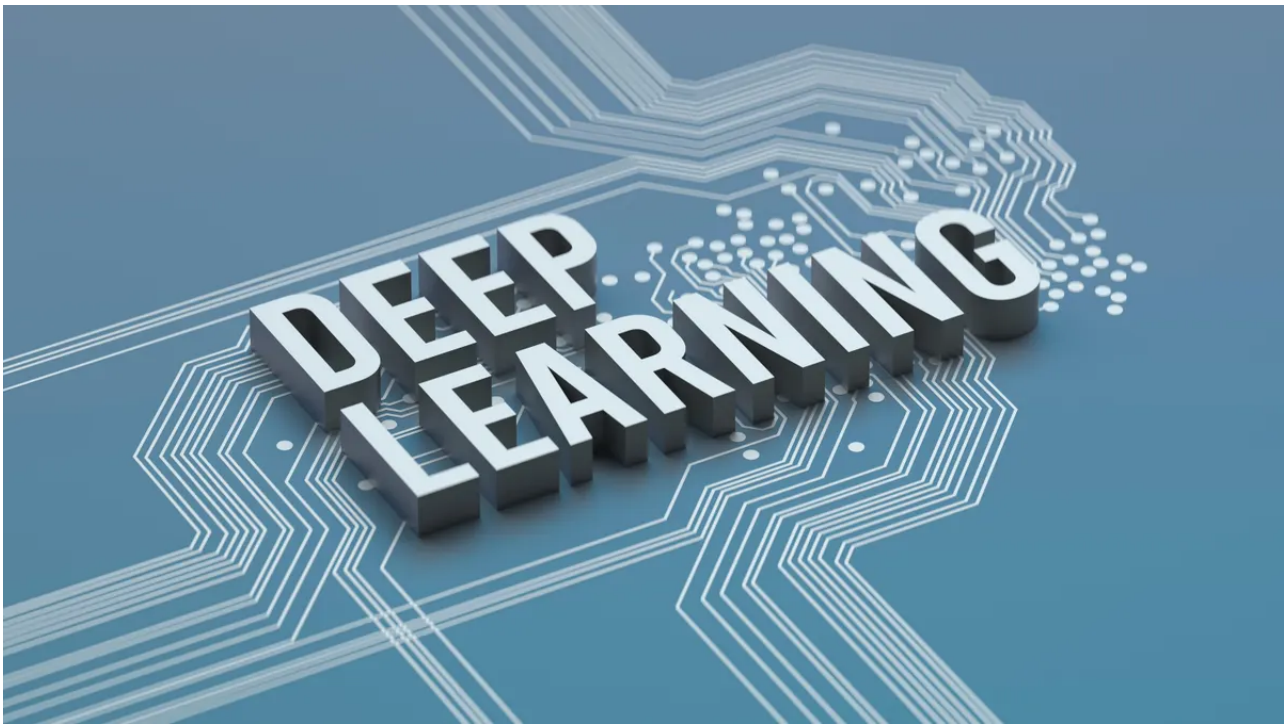
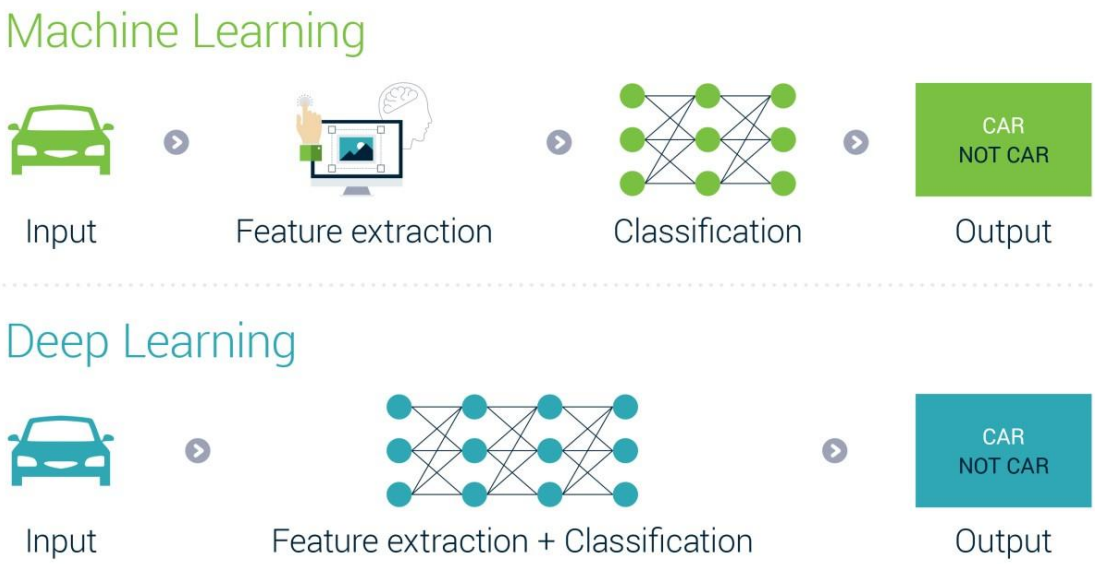
LEARN, THINK, INNOVATE





Overview

Let eMexo Technologies **Best Deep Learning Training in Electronic City Bangalore** take you from the fundamentals of Deep Learning to Advance Deep Learning and make you an expert in developing real-time Deep Learning applications. Here are the major topics we cover under this Deep Learning course Syllabus **Introduction to Deep Learning, Understanding the Neural Network with TensorFlow, Deep Dive into Neural Network with TensorFlow, Master Deep Networks, Convolutional Neural Network (CNN), Recurrent Neural Network (RNN), Restricted Boltzmann Machine (RBM) and Autoencoders, Keras API, and TFLearn API.** Each topic will be covered in a practical way with examples for our **Deep Learning Course in Electronic City Bangalore**.

All the topics will be covered with Practical and hands-on training. Our trainers have industry experience with live project experience in cutting-edge technologies which they teach. We hire only the Best Deep Learning industry specialists as trainers for our **Deep Learning Certification Training in Electronic City Bangalore**.

If you are looking for **Deep Learning Certification Course in Electronic City Bangalore**, eMexo Technologies is the **Best Deep Learning Training Institute in Electronic City Bangalore**. Come over to our training institute for a free demo class. Let our trainer give you a demo on Deep Learning and only then do you make the decision to enroll in the training program.

Training Features

Real-life Case Studies

Do a real-life case study to understand the usage in real-world scenarios.

Assignments

Each class will be followed by a practical assignment switch that can be completed before the next class.

Preparation for interview

Our trainers are professionals working in multinational corporations. They are experts in their field and know exactly what the interviewer will look for in the candidate. Experienced trainers not only share interview questions but also conduct mock interviews to help prepare for the actual interview.

Key Features

eMexo Technologies offers the **Best Deep Learning Training Course in Electronic City Bangalore** with the TOP industry expert trainers.

Here are the key features.

★ Free Demo Class Available

★ Practical Approach

★ Expert & Certified Trainers
★ 100% Job Oriented Training
★ Real World use cases and Scenarios
★ Completed 500+ Batches
★ Certification Guidance

Unit 1: Introduction to Deep Learning

Objective: In this module, you will get a basic understanding of deep learning and what kind of problems deep learning will address. Also, get clarity about the difference between Machine learning and Deep learning.

➢ Origin of Deep Learning
➢ Machine Learning limitations
➢ Introduction to Deep Learning
➢ Deep Learning advantages and Machine Learning limitations
➢ Real-life use cases
➢ Brush up Machine Learning concepts
➢ Hands-on: How to implement linear regression and logistic regression using Deep Learning

Unit 2: Understanding the Neural Network with TensorFlow

Objective: In this module, you will get an idea about the deep learning structure and how we can build it using Neurons (Perceptrons). You will familiarize yourself with different activation functions and have a brief introduction to the TensorFlow framework.

➢ Structure and Working of Deep Learning
➢ Detailed explanation about Perceptron
➢ Different Activation functions
➢ Introduction to TensorFlow
➢ What is the computational graph?
➢ Basic TensorFlow coding and graph visualization
➢ Brief introduction about Variables, Constants, and Place Holders
➢ Creating a simple TensorFlow model
➢ Hands-on: Build a classification model using TensorFlow

Unit 3: Deep dive into Neural Network with TensorFlow

Objective: In this module, you will be learning about Deep Neural Networks and how does it work. Also, you will get more understanding of forwarding and backward propagation.

➢ Different layers in the Neural network
➢ Understanding Neural Networks in Detail
➢ Introduction to Multi-layer Perceptron
➢ What is Forward propagation and Backpropagation?
➢ Build a Multi-layer perceptron model using TensorFlow
➢ Familiarise with using Tensor Board
➢ Hands-on: Build a deep neural network to classify digits in the MNIST dataset

Unit 4: Master Deep Networks

Objective: In this module, you will get more hands-on for the TensorFlow framework. You will get to know more details about the data flow in TensorFlow.

- ➢ What is a Deep Neural Network?
- ➢ How did Deep Neural Network help to increase accuracy?
- ➢ Understanding the working of Deep Neural Networks
- ➢ What are Weight and Bias, and how it is getting updated?
- ➢ How gradient descent is useful to update parameters?
- ➢ Types of Deep Networks
- ➢ Hands-on: Building a classification model using a Multi-layered perceptron.

Unit 5: Convolutional Neural Network(CNN)

Objective: In this module, you will be learning what a convolutional neural network is and how it is different from Feedforward neural network. Also, you will get an understanding of various layers in the Convolutional Neural Network and what are the real-time applications of CNN.

- ➢ Introduction to CNN
- ➢ Advantage of CNN over other Neural Networks
- ➢ Applications of CNN
- ➢ Architecture of CNN
- ➢ Different layers and their use to build a CNN model
- ➢ Real-time use cases of CNN
- ➢ Hands-on: Building an Image classification model using CNN

Unit 6: Recurrent Neural Network (RNN)

Objective: In this module, you will get an understanding of what is RNN and it's working. Also, get to know the advantage of RNN over other Neural Network models and you will be familiarised with LSTM, why we need to use LSTM, and the real-time application of LSTM.

- ➢ Introduction to RNN
- ➢ How RNN is different from other Neural Network models
- ➢ Structure and working of RNN
- ➢ Exploding and Vanishing Gradient descent problem
- ➢ Long Short-Term Memory (LSTM)
- ➢ How did LSTM overcome the problem of Vanishing Gradient descent?
- ➢ Real-time use cases of LSTM
- ➢ Hands-on: Building an RNN model to predict the next word in the sentence.

Unit 7: Restricted Boltzmann Machine (RBM) and Autoencoders

Objective: In this module, you will get a great understanding of RBM and Autoencoders. Also, you will get an idea about how Autoencoders are different from PCA and you will be gone through some real-time applications of RBM and Autoencoders.

- What is a Restricted Boltzmann Machine (RBM)
- Applications of RBM
- How to do Collaborative Filtering with RBM?
- Introduction to Autoencoders
- Autoencoders applications
- Understanding Autoencoders and how it is different from PCA
- Hands-on: Predict the customer rating for each movie.

Unit 8: Keras API

Objective: In this module, you will get to know the various functions and features of Keras API and how does it use. After this session, you will be able to develop a Neural Network model using Keras API.

- Introduction to Keras
- How to build a Model in Keras using TensorFlow backend
- Sequential and Functional Composition
- Explaining Predefined Neural Network Layers
- What is Batch Normalization?
- How to save and load a model
- Using TensorBoard with Keras
- Hands-on: Building an image classification model using Keras

Unit 9: TFLearn API

Objective: In this module, you will get to know the different functionalities and features of TFLearn API and how does it use. After this session, you will be able to develop a Neural Network model using TFLearn API.

- Introduction to TFLearn
- How to build a Model in TFLearn using TensorFlow backend
- Sequential and Functional Composition
- Explaining Predefined Neural Network Layers
- What is Batch Normalization?
- How to save and load a model
- Using TensorBoard with TFLearn
- Hands-on: Building a Neural network model to classify the digits in the MNIST dataset using TFLearn

FAQs

1. How is the training organized? How much percentage is theoretical and how much is practical hands-on?

We at eMexo believe nothing beats hands-on practice when it comes to learning a concept. Our teaching methodology is 100% practical and hands-on oriented. You learn a concept, you practice it then and there with the trainers. We also give you assignments for each topic which you can practice at home and any doubts regarding the topic can be cleared with the trainer the next day.

2. What is the course duration? How and when do you plan to complete the course?

We generally cover our courses in 60 hours, however, we know that we can't put a hard- stop to learning

with a number. Our trainer will make sure that you have learned everything that is part of the curriculum. This could mean 48 hours or 60 hours, it doesn't matter.

3. What is the material provided in the training?

We have industry standard course material which is used by our trainers to train you. At the end of the training, apart from the notes which you have taken during the course, we will also provide you with the training material which was used. This training material includes the training content, interview questions, etc.

4. Do you help in preparing for the interview?

Our trainers are working professionals who work in MNCs. They are the experts in their domain and they know exactly what an interviewer looks into a candidate. Our expert trainers apart from sharing the interview questions will also conduct mock interviews to help you prepare for the real interview.

5. Who are your trainers?

Our trainers are industry experts who work in their respective technologies day in and day out. They work in MNCs and are technology experts within their organizations.

6. **What is the total batch size per course?**

We maintain a strict batch size of a maximum of 5 students. We also provide exclusive one-to-one training as well. Talk to our training partner to get more details.

7. Do you provide certification for the course?

Yes, at the end of the training, we provide a certification of completion.

8. Will I be joining a new batch or being merged with another batch?

You will be added to a new batch.

9. Is fast-track training available?

Yes, we also provide fast-track training for those who want to complete the course faster. The curriculum and the total hours required to complete the course will remain the same. However, the trainer will be spending more hours with you to complete the course.

10. Do you assist in job placement?

Our trainers are expert professionals in their organizations and they often act as the interviewer to hire new candidates. Our trainers will help you prepare your resume with industry standards. After all, they know exactly what to look for in a resume.

11. Timings for training - Regular training/weekend training?

We provide both regular and weekend training. Talk to our training partner to learn more about the timings.

12. Will you be working on a live project during training?

Yes, apart from doing the hands-on practice our trainer will also be taking a real-world project and working with you on the implementation.

13. What happens if I miss a class?

If you miss a class the content of that class will be taught to you again. With us, you might miss a class but not the content.

14. Can I attend a demo before the actual class?

Yes, absolutely! Talk to our training counselor on the phone at **+91-9513216462** or email us at **info@emexotechnologies.com** to arrange a free demo. You can also fill in the contact us form below and we will call you to discuss your training requirements.