

# Certificate in Artificial Intelligence and Cognitive Technologies



## Simplifying Learning Learning by Doing in 'Project Based Learning Mode'

### Key Highlight

#### 70:30 TEACHING PATTERN

70% Hands on Session and 30% Theory

#### PERSONALISED TRAINING

Cloud Based Platform for Hands on Sessions

#### Expert Pool of Faculty

Excellent Blend of Faculty from Industry & Academia

#### NETWORK

Network of Faculty and Peers to facilitate the learning.

#### Capstone Project

Project on the trending and industry-oriented topic e.g. Supply Chain, Healthcare, eCommerce etc.

### Contact Us

IEDC

MPTP SKVM's NMIMS

Savalde Shirpur Dist Dhule

email: [iedc.shirpur@nmims.edu](mailto:iedc.shirpur@nmims.edu)

+91-9371-550-875

[www.nmims.edu](http://www.nmims.edu)

*Artificial intelligence and Cognitive Technologies will create 3.3 million jobs globally and become a positive 'net job motivator' by 2020, -- Gartner Inc.*

### About NMIMS

NMIMS is one of the fastest growing and the top, private University in the country. It has undergone a tremendous transformation since its commencement. Today, it stands as a large imposing University with 14 specialized schools plus 5 off-Campus operations, with an intake of over 12000 students. We always try to keep our activities abreast of the ever-changing and evolving corporate world. The certificate in AI and Cognitive Technologies is one more step towards adopting to the changing scenario

### Scope

Now it is time to answer a principal query, how the mission for resilient Artificial Intelligent System will impact entire humanity and can it become better than humans at all cognitive tasks? There is significant demand for AI and Cognitive Technologies skills. IBM Development Centre predicts that 50% of developer teams will embed cognitive capabilities in their applications by 2019, whereas the IT giant Accenture warranted their employee to acquire the AI and Cognitive Skills. Cognitive domain is progressing faster than expectation and entry of big players like Amazon, Microsoft, IBM, Google, Accenture etc. made it progress rapidly. There are very few institutes offering the certification in AI and Cognitive domain, which is creating the void between actual-expected outcomes of graduates, it is serious matter of concerns

# Salient Features

- ❖ Practical in Innovation and Project Based Learning Mode under the joint supervision (Video Conferencing) of academic and industrial experts on outsourced industrial projects.
- ❖ IPBL for unique learning experience and need based training
- ❖ Platform to explore the innovative ideas of students and faculty



Live Online Teaching

## Prerequisite

- Prerequisite:
  - Knowledge of basic computer science principles and skills at a level sufficient to write a reasonably non-trivial computer program.
  - Familiarity with the basic probability theory.
  - Familiarity with the basic linear algebra.

## Expected Outcomes

After completing the course learners will able to

- Build Intelligent and Cognitive Applications
- Master AI fundamentals.
- Master Convolutional Neural Network, Back Propagation, Cost Function, Gradient Descent Deep Learning, Artificial Neural Network
- Hands on Experience on TensorFlow, Keras and Azure ML

## Teaching Methodology: Innovation and Project Based Learning (IPBL) Mode

The Innovation & Project Based Learning to be implemented using 70:30 patterns i.e. 70% practical and 30% theory. The theory and practical will be based on actual problems through collaborative projects and jointly taught/supervise by industrial experts, Scientist from collaborative network.

## Course Content Developed by Intel

## How to Apply

**Early applications are encouraged. Seats fill up soon!**

Scan the QR code or [Click Here to Apply](#)



**For NEFT Payment:**  
A/c: 13871450000032  
A/c Name: SVKM'S NMIMS  
Bank: HDFC BANK LTD  
IFSC: HDFC0001387

# COURSE HIGHLIGHTS

Our approach to this course is to teach the underlying concepts and math of AI and Cognitive Technology. Going beyond the theory, Project Based Learning invites participants into a conversation, where learning is facilitated by live subject matter experts and enriched by practitioners in the field. We expect learners would be required to put in 6-8 hours per week.

## ❖ Quizzes / Assignments

## ❖ Cloud Based Platform for Hands on Session

## ❖ Faculty Video Lectures

## ❖ Q&A Sessions with

- Course Leaders
- Moderated
- Discussion Boards

## ❖ Application Projects

Scan QR Code to Apply



## Course Delivery

Practical: Total 70% syllabus will be covered through practical  
Jupyter Notebook: It's an open sourced cloud-based platform used by Course Era, Stanford and Google

Theory: Total 30% syllabus

IEDC's Apprentice Virtual Classroom: Cloud based advance interactive platform for content delivery, developed by IEDC Shirpur

## APPLICATION PROJECTS

The course requires learners to work on application projects. These projects require learners to apply the AI and Cognitive concepts they have learned to datasets and derive inferences. These application projects are intentionally made to be challenging. We expect learners to spend substantial time and effort solving the application projects. At the end of the course, we expect learners to be able to apply Machine Learning to solve many of the business problems they face at their workplace

## Duration of Course:

- 12 Weeks (150 Hrs.)
- Approximately 12 Hrs./Week

Fees: ₹ 30,000/- (Thirty Thousand Only) + 18% GST

## Course Content:

- Introduction to Artificial Intelligence
- Overview of various cognitive and AI framework
- Advance Artificial Intelligence Technique (AI Algorithms, Machine Learning, Data Visualization)
- Predictive Analytics using AI platforms, Building Sensor/IoT Based Intelligent System
- Advance Machine Learning, Building Knowledge-enabled apps and service
- AI and Cognitive Technology in Modern Business with hands on Azure, Keras and TensorFlow Labs : Computer Vision, NLP and Voice Processing
- Cognitive Service Labs: Health, Transport, Education, Advertising and Banking
- Master AI with Deep Learning, Computer Vision, Natural Language Processing, TensorFlow & more.
- 8 hands-on industry relevant projects
- Case studies from Uber, Netflix, Google, Amazon & more
- Career support
- Sessions by industry experts