

# Machine Learning & AI

Machine learning is the science of getting computers to act without being explicitly programmed. In this course, you will learn about machine learning techniques, and gain practice implementing them and getting them to work for yourself

## You must Know!

### Duration:

40 Hours

### Who should attend?

Data Analysts, Developers, Business Intelligence professionals, Data Engineers, and other roles responsible for analyzing the organization's data

### Main Topics:

- What are AI/ML and key terminologies in this domain?
- Intro to Python for Machine learning
- Supervised learning
- Unsupervised learning
- NLP
- Deep learning basics

## Course Modules

### Module 1: What are AI/ML and key terminologies in this domain?

- Data Science pipeline
- Supervised vs. unsupervised
- Cross-Validation
- Over/underfitting
- Test train split
- Validation Data
- Applications

### Module 2: Intro to Python for Machine learning

- Jupiter intro
- Pandas
- Data Visualization
- Data Pipelines

### Module 3: Supervised learning

- Linear Regression
- Logistic regression
- Trees

### Module 4: Unsupervised learning

- Intro to unsupervised learning
- K nearest neighbors
- What is clustering?
- K-means

### Module 5: NLP

- Introduction to NLP
- Preparing textual data
- NLP models

### Module 6: Deep learning basics

- Intro and history
- Neural networks
- Properties of a neural net



המרכז הבינלאומי  
ללימודי הייטק וחדשנות

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מתקדמים  
לקריירה בהייטק

תל אביב  
המרץ 2

המכללה שומרת לעצמה את הזכות לערוך מעת לעת, לפי שיקול דעתה, שינויים בתכנית הלימודים, היקף שעות הלימוד, סגל המדריכים וכד', ולא יראו בכל מידע המפורט בדפי מידע של המכללה כהתחייבות כלשהי מצד המכללה.