MAKE IT BIG WITH BIG DATA ANALYTICS
ABOUT US

UpX Academy is an ed-tech platform providing advanced professional training in Big Data Analytics that helps individuals and businesses rise to the advanced skill requirements of the current industry. Powered by IT major Tech Mahindra, UpX Academy provides industry oriented courses on Big Data Analytics, Data Science & Machine Learning delivered by world-class faculty who also have more than 7+ years of prior working experience in above areas.

Designed by industry experts, our courses integrate real-world hands-on training with case studies and projects using datasets from companies like Amazon, Nike, Yelp, Walmart, etc. This training is supported with teaching assistance which allows individuals to develop hands on skills by applying the concepts and becoming technically proficient.
INDEX

01. Faculty 04

02. Applications 05

03. Leaders Speak & Opportunities 06

04. What’s new in July 2019 batch? 07

05. Subjects & Tracks 08

06. Course Fees 14

07. Career Support 19

08. Curriculum 22

09. FAQs 41

10. Coordinates 42
FACULTY

Our world-class faculty are experienced working professionals working in senior positions of top-tier companies like

Google, Kabbage, ISB, Flipkart, genpact, hp, IBM, Jio
COMMON APPLICATIONS OF BIG DATA & DATA SCIENCE

Flipkart
Shopping recommendations to enhance customer experience

Facebook
Friend suggestions and Targeted Advertising

Netflix
Customized entertainment and music listings

Walmart
Analyse purchase patterns and behaviour to optimize customer experience

Barclays
Identify credit risk and fraud detection

Uber
Determine dynamic pricing based on traffic congestion
LEADERS SPEAK

The Job of the Future
Data Scientist - The sexiest job of 21st century
- Harvard Business Review

High Demand, Low Supply
By 2018, US alone will have a shortage of ~1.5 million Big Data skilled professionals
- McKinsey

Attractive Salaries
A Data Scientist draws an average salary of $118,000 – 2X higher than that of a software engineer
- Glassdoor
## What’s new in July 2019 batch

<table>
<thead>
<tr>
<th>SALIENT FEATURES</th>
<th>CURRENT TRACK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>Regular + Fast Track</td>
</tr>
<tr>
<td>Format</td>
<td>Live Online Instructor</td>
</tr>
<tr>
<td></td>
<td>LED + Self Paced</td>
</tr>
<tr>
<td>Course Content</td>
<td>Complete</td>
</tr>
<tr>
<td>Choice of Tracks</td>
<td>✅</td>
</tr>
<tr>
<td>Payment</td>
<td>EMI*</td>
</tr>
<tr>
<td>Placement Opportunity</td>
<td>Tech Mahindra*</td>
</tr>
</tbody>
</table>

* Terms and Conditions Apply
ARTIFICIAL INTELLIGENCE TRACK

12 weeks

- Additional Machine Learning Concepts*
- Applied Data Science with Python

21 weeks

- Natural Learning Processing
- Basics of Deep Learning
- Additional Machine Learning Concepts*
- Applied Data Science with Python

28 weeks

- Deep Learning applications in industry
- Computer Vision
- Natural Learning Processing
- Basics of Deep Learning
- Additional Machine Learning Concepts*
- Applied Data Science with Python

MACHINE LEARNING FOR ARTIFICIAL INTELLIGENCE ★★★

DEEP LEARNING SPECIALIZATION ★★★

TECH MAHINDRA CERTIFICATION PROGRAM IN ARTIFICIAL INTELLIGENCE ★★★★★

W - weeks
* Recorded
DATA SCIENCE TRACK

FOUNDATION
- Data analytics with Python
- Machine Learning

SPECIALIZATION
- Data analytics with Python
- Machine Learning
- Tableau

ADVANCED
- Data analytics with Python
- Machine Learning
- Deep Learning using NLP (Recorded)
- Advanced Machine Learning (Recorded)
- Tableau

TECH MAHINDRA CERTIFICATION PROGRAM IN DATA SCIENCE

W - weeks
BIG DATA ANALYTICS PROGRAMME
(Combination of Big Data & Data Science tracks)

<table>
<thead>
<tr>
<th>12 weeks</th>
<th>22 weeks</th>
<th>31 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Big Data Tracks</strong></td>
<td><strong>Data Science Tracks</strong></td>
<td><strong>Tech Mahindra Certification Program in Big Data Analytics</strong></td>
</tr>
<tr>
<td><strong>Data analytics with Python</strong></td>
<td><strong>Machine Learning</strong></td>
<td><strong>Tableau</strong></td>
</tr>
<tr>
<td><strong>Hadoop</strong></td>
<td><strong>Data analytics with Python</strong></td>
<td><strong>Machine Learning</strong></td>
</tr>
<tr>
<td><strong>Spark</strong></td>
<td><strong>Spark</strong></td>
<td><strong>MongoDB, HBase, Sqoop &amp; Flume (Recorded)</strong></td>
</tr>
<tr>
<td><strong>Hadoop</strong></td>
<td><strong>Hadoop</strong></td>
<td><strong>Spark</strong></td>
</tr>
</tbody>
</table>

W - weeks
PROJECT

Uncover user hidden activity pattern that is using Facebook data

Assign customers into groups based on similarity in their purchase behavior to enhance sales and resource management.

Build a movie recommendation system using Machine learning methods

Tackle the curse of dimensionality reduction and predict the time taken to pass testing for a new Mercedes car model

Analyse visa chances for Data Scientists under H1B category

Identify cancer using personalized machine learning product
PROJECT

Develop an AI model to predict Uber demand during any day and time.

Use NLP to develop intelligent system which analyze human conversations.

Use linear regression to estimate car prices.

Distinguish healthy people from those with Parkinson's disease based on voice recordings taken from individuals.
COURSE FEE
# TECH MAHINDRA CERTIFICATION PROGRAMMES

<table>
<thead>
<tr>
<th>Programme</th>
<th>Duration</th>
<th>Course Fee</th>
<th>Discounted Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech Mahindra Certification in Big Data Analytics</td>
<td>6 Months</td>
<td>95000</td>
<td>67260</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Data Science</td>
<td>6 Months</td>
<td>95000</td>
<td>67260</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Artificial Intelligence</td>
<td>6 Months</td>
<td>100000</td>
<td>70800</td>
</tr>
</tbody>
</table>

**Instructor-led weekend courses**

**Next Batch Starts on 06th July**

**Enrolment deadline is 23rd June**

**3 month EMI option with ICICI, HDFC, Axis, AMEX, IndusInd & Kotak Mahindra**

**Use coupon code UPX6M on our website to avail discount on Tech Mahindra Certification in Data Science & Big Data Analytics programme.**

**Use coupon code UPXAI6M on our website to avail discount on Tech Mahindra certification in Artificial Intelligence**

**Additional Discount on group enrolments**

*Prices inclusive of taxes*
# ARTIFICIAL INTELLIGENCE TRACKS

<table>
<thead>
<tr>
<th>Courses</th>
<th>Duration</th>
<th>Course Fee</th>
<th>Discounted Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Learning for Artificial Intelligence</td>
<td>12 weeks</td>
<td>45000</td>
<td>31860</td>
</tr>
<tr>
<td>Deep Learning Specialization</td>
<td>21 weeks</td>
<td>82500</td>
<td>58410</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Artificial AI</td>
<td>28 weeks</td>
<td>100000</td>
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</tr>
</tbody>
</table>

- **Instructor-led weekend courses**
- **Next Batch Starts on 06th July**
- **Enrolment deadline is 23rd June**
- **3 month EMI option with ICICI, HDFC, Axis, AMEX, IndusInd & Kotak Mahindra**

Use coupon code UPXAISP to avail discount on our website on Machine Learning for Artificial Intelligence Programme
Use coupon code UPXAIAD to avail discount on our website on Deep Learning Specialization Programme
Additional Discount on group enrolments

Prices inclusive of taxes
# DATA SCIENCE TRACKS

<table>
<thead>
<tr>
<th>Courses</th>
<th>Duration</th>
<th>Course Fee</th>
<th>Discounted Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Science Foundation</td>
<td>05 weeks</td>
<td>25000</td>
<td>23600</td>
</tr>
<tr>
<td>Data Science Specialization</td>
<td>10 weeks</td>
<td>48000</td>
<td>45312</td>
</tr>
<tr>
<td>Advanced Data Science</td>
<td>14 weeks</td>
<td>75000</td>
<td>53100</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Data Science</td>
<td>25 weeks</td>
<td>95000</td>
<td>67260</td>
</tr>
</tbody>
</table>

Enrolment deadline is 23rd June

Next Batch Starts on 06th July

3 month EMI option with ICICI, HDFC, Axis, AMEX, IndusInd & Kotak Mahindra

Instructor-led weekend courses

Use coupon code UPXDSFD to avail discount on our website on foundation Programme
Use coupon code UPXSP to avail discount on our website on specialization Programme
Use coupon code UPXAD to avail discount on our website on advanced Programme

Additional Discount on group enrolments

Prices inclusive of taxes
## BIG DATA ANALYTICS TRACKS

<table>
<thead>
<tr>
<th>Courses</th>
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<tr>
<td>Big Data Analytics Specialization</td>
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<td>31 weeks</td>
<td>95000</td>
<td>67260</td>
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</tbody>
</table>

Prices inclusive of taxes

- Instructor-led weekend courses
- Next Batch Starts on 06th July
- Enrolment deadline is 23rd June
- 3 month EMI option with ICICI, HDFC, Axis, AMEX, IndusInd & Kotak Mahindra

Use coupon code UPXSP to avail discount on our website on specialization Programme
Use coupon code UPXAD to avail discount on our website on advanced Programme
Additional Discount on group enrolments
CAREER SUPPORT

Exclusive Industry immersion Sessions

Interview preparation guides

Placements in Tech Mahindra*

Exclusive Resume workshop session by an expert

Integrating real world projects to make your resume world class

Exclusive Industry immersion Sessions

Extra sessions on cutting edge technologies

19
COURSE FEATURES

Industry specific projects
Choose group project from BFSI, Retail, Healthcare, Entertainment, Airlines & Sports

Discussion forum
Always buzzing with students interacting with each other

Dedicated Student Support Team
Help beyond the classroom hours

Study groups
City wise study groups of 8-10 to work on projects

Application based learning
Theory Hands-on Case study Project

Curriculum
Designed by experts Knowledge repositories, Pre-reads, Videos, Assignments & Installation guides
CERTIFICATION

LEVEL 1

CERTIFICATE OF COMPLETION

LEVEL 2

CERTIFICATION

Placement opportunity in Tech Mahindra from 2019*

* Terms & Conditions apply
Designed by experts, our Big Data, Data Science, Artificial Intelligence and curriculum aims at delivering a holistic knowledge to every student from a fresher to a professional.
ARTIFICIAL INTELLIGENCE
Module 01: Introduction to Data Science

Module 02: Introduction to Python

Module 03: Descriptive statistics and Probability Distributions

Module 04: Important Packages in Data Science
(Numpy and Pandas)

Module 05: Charting Fundamentals with Matplotlib and Seaborn

Module 06: Step into the world of Data Science

Module 07: Introduction to Machine Learning

Module 08: Linear and Logistic Regression

DURATION: 12 WEEKS
ARTIFICIAL INTELLIGENCE - MACHINE LEARNING FOR AI

Applied Data Science with Python & Additional Machine Learning Concept

DURATION: 12 WEEKS

Week 05
Module 09: Linear and Logistic Regression
Module 10: Decision Tree and Random Forest

Week 06
Module 11: Boosting

Week 07
Module 12: Support Vector Machine

Week 08
Module 13: Stacking

Week 09
Module 14: Unsupervised learning (Anomaly Detection)
Module 15: Research Methodology in Machine Learning

Week 10
Module 16: PCA and LDA
Module 17: KNN
ARTIFICIAL INTELLIGENCE - MACHINE LEARNING FOR AI

Applied Data Science with Python & Additional Machine Learning Concept

DURATION : 12 WEEKS

Week 11  Module 18: Kmeans Clustering
          Module 19: Market Basket Analysis

Week 12  Module 20: Recommender Systems
ARTIFICIAL INTELLIGENCE - DEEP LEARNING SPECIALIZATION
Basics of Deep Learning & Natural Language Processing
DURATION: 21 WEEKS

MACHINE LEARNING FOR AI

+ 

Week 13  Module 21: Introduction to Deep Learning

Week 14  Module 22: Basics of tensorflow programming

Week 15  Module 23: Introduction to Neural Networks

Week 16  Module 24: Introduction to Spacy Toolkit - it's Data Structures & Models
           Module 25: Basic Text Classification Model

Week 17  Module 26: Word Vectors & Representation

Week 18  Module 27: RNN & CNN in Text Classification
Module 28: Transfer Learning in NLP
Module 29: Transformer Based Text Models - Elmo, GPT2 & Bert
Module 30: Standard Text Problems - Classification, Entity Prediction, Sentiment Analysis
Module 31: NLP Production Grade Use case
TECH MAHINDRA CERTIFICATION PROGRAM IN AI

Computer Vision & Deep Learning Applications in Industry

DURATION : 28 WEEKS

DEEP LEARNING SPECIALIZATION

- Week 22: Module 32: Image Processing Fundamentals
  Module 33: Convolutional Neural Networks

- Week 23: Module 34: Popular CNN Architectures and transfer learning

- Week 24: Module 35: Object Localization
  Module 36: Object Detection

- Week 25: Module 37: Tensorflow Object Detection API

- Week 26: Module 38: Image Segmentation
Module 39: Autoencoders & Generative Adversarial Nets

Module 40: Model interpretability and AutoML in DL
DATA SCIENCE
# DATA SCIENCE - FOUNDATION

Data Analytics with python

**DURATION : 5 WEEKS**

<table>
<thead>
<tr>
<th>Week 01</th>
<th>Module 1: Data Science Introduction &amp; Use Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Module 2: Python Basics: Basic Syntax, Data Structures</td>
</tr>
<tr>
<td>Week 02</td>
<td>Module 3: Python Basics: Loops, If-elif statements, Functions, Exception Handling</td>
</tr>
<tr>
<td></td>
<td>Module 4: Statistics 1: Measures of central tendency, Population, Sample, Probability Distribution</td>
</tr>
<tr>
<td>Week 03</td>
<td>Module 5: Statistics 1: Normal and Binomial Distribution, Random Variable, Pictorial Representations</td>
</tr>
<tr>
<td></td>
<td>Module 6: Python Advanced: Numpy, Pandas</td>
</tr>
<tr>
<td>Week 04</td>
<td>Module 7: Python Advanced: Data Manipulation, Matplotlib</td>
</tr>
<tr>
<td></td>
<td>Module 8: Exploratory Data Analysis: Data Cleaning, Data Wrangling</td>
</tr>
<tr>
<td>Week 05</td>
<td>Module 9: Exploratory Data Analysis: Data Visualisation</td>
</tr>
<tr>
<td></td>
<td>Module 10: Exploratory Data Analysis: Case Study</td>
</tr>
</tbody>
</table>
## DATA SCIENCE - SPECIALIZATION

### Machine Learning

**DURATION : 05 WEEKS**

### FOUNDATION

<table>
<thead>
<tr>
<th>Week</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Module 01: ML Introduction &amp; Use Cases</td>
</tr>
<tr>
<td></td>
<td>Module 02: Statistics 2 - Inferential Statistics</td>
</tr>
<tr>
<td>Week 2</td>
<td>Module 03: Linear Regression</td>
</tr>
<tr>
<td></td>
<td>Module 04: Logistic Regression</td>
</tr>
<tr>
<td>Week 3</td>
<td>Module 05: Decision Trees, Random Forest</td>
</tr>
<tr>
<td></td>
<td>Module 06: Modelling Techniques(PCA, Feature Engineering)</td>
</tr>
<tr>
<td>Week 4</td>
<td>Module 07: KNN, Naive Bayes</td>
</tr>
<tr>
<td></td>
<td>Module 08: Support Vector Machines(SVM)</td>
</tr>
<tr>
<td>Week 5</td>
<td>Module 09: Clustering, K-means</td>
</tr>
<tr>
<td></td>
<td>Module 10: Time Series Modelling</td>
</tr>
</tbody>
</table>
DATA SCIENCE - SPECIALIZATION

Data Visualization in Tableau

DURATION : 04 WEEKS

Week 01
- Module 01: Introduction to Tableau
- Module 02: Data visualisation

Week 02
- Module 03: Analytics concepts with Statistics - I
- Module 04: Analytics concepts with Statistics - II

Week 03
- Module 05: Analytics concepts using calculated fields
- Module 06: Analytics concepts for integrating dashboards

Week 04
- Module 07: Mini project workshop - Visual Analytics
- Module 08: Integration of Tableau with Python
## DATA SCIENCE - ADVANCED

### Advanced Machine Learning (Recorded)

**DURATION : 06 WEEKS**

<table>
<thead>
<tr>
<th>Week</th>
<th>Module 01: Market Basket Analysis &amp; Apriori Algorithm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Module 02: Recommendation System</td>
</tr>
<tr>
<td>Week 02</td>
<td>Module 03: Recommendation System - Mini Project</td>
</tr>
<tr>
<td></td>
<td>Module 04: Dimensionality Reduction (LDA, SVD)</td>
</tr>
<tr>
<td>Week 03</td>
<td>Module 05: Dimensionality Reduction (Matrix optimisation)</td>
</tr>
<tr>
<td></td>
<td>Module 06: Anomaly Detection</td>
</tr>
<tr>
<td>Week 04</td>
<td>Module 07: XG Boost</td>
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<tr>
<td></td>
<td>Module 08: Gradient Boosting Machine(GBM)</td>
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<tr>
<td>Week 05</td>
<td>Module 09: Stochastic Gradient Descent(SGD)</td>
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<tr>
<td></td>
<td>Module 10: Ensemble Learning - I</td>
</tr>
<tr>
<td>Week 06</td>
<td>Module 11: Ensemble Learning - II</td>
</tr>
<tr>
<td></td>
<td>Module 12: Introduction to Neural Networks</td>
</tr>
</tbody>
</table>
Module 01: Introduction to NLP & Deep Learning

Module 02: Word Embeddings

Module 03: Word window classification

Module 04: Introduction to Artificial Neural Networks

Module 05: Introduction to Tensorflow

Module 06: Recurrent Neural Networks for Language modelling

Module 07: Gated Recurrent Units (GRUs), LSTMs

Module 08: Recursive Neural network

Module 09: Convolutional Neural Networks for sentence classification

Module 10: Dynamic Memory Networks
BIG DATA ANALYTICS
BIG DATA

Hadoop

DURATION: 6 WEEKS

Week 1
Module 1: Introduction to Big Data
Module 2: Python Essentials - I

Week 2
Module 3: Python Essentials - II
Module 4: Introduction to Hadoop

Week 3
Module 5: Hadoop Architecture & Ecosystem
Module 6: Hadoop Distributed File System (HDFS)

Week 4
Module 7: Introduction to Map Reduce
Module 8: MapReduce Programming with Python

Week 5
Module 9: Apache Pig
Module 10: Apache Pig Hands-on

Week 6
Module 11: Apache Hive
Module 12: Apache Hive Hands-on

Week 7
Module 13: Integration of Hive and Pig using H Catalog
| Week 01 | Module 01: Programming with Scala-I  
| Module 02: Programming with Scala-II |
| Week 02 | Module 03: Introduction to Apache Spark architecture  
| Module 04: Spark programming concepts |
| Week 03 | Module 05: Spark Core programming  
| Module 06: Introduction to Spark SQL |
| Week 04 | Module 07: Spark SQL hands-on  
| Module 08: Introduction to Apache kafka |
| Week 05 | Module 09: Introduction to Spark Streaming  
| Module 10: Spark Streaming hands-on |
| Week 06 | Module 11: Integration of kafka with spark  
| Module 12: Machine Learning with Spark MLlib  
| Module 13: Live Practice session |
BIG DATA
MongoDB, HBase, Sqoop & Flume

DURATION : 04 WEEKS

Week 01  Module 1: Introduction to NoSQL
          Module 2: Getting started with MongoDB

Week 02  Module 3: MongoDB Essentials - I
          Module 4: MongoDB Essentials - II

Week 03  Module 5: Hands-on MongoDB
          Module 6: HBase

Week 04  Module 7: SQOOP
          Module 8: FLUME
Where do the classes take place & what are the class timings?

<table>
<thead>
<tr>
<th>Batch</th>
<th>Track</th>
<th>Day &amp; Timings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekend/Fastrack</td>
<td>Data Science &amp; AI track</td>
<td>Sat &amp; Sun</td>
</tr>
<tr>
<td></td>
<td>Big Data Analytics</td>
<td>08 am - 10 am IST</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 am - 1 pm IST</td>
</tr>
</tbody>
</table>

FAQs

Do I have to purchase any software
No, we don’t provide necessary installation guides of the software required.

What are the specific system requirements
8GB RAM, 500GB Hard disk (i3 Processor).

What are the specific system requirements
Projects are real world datasets from companies like Nike, Yelp, Amazon, Netflix etc. that are provided to our students.
FAQs

What if I miss a class?
You can access recordings of all classes on our LMS Portal from the week following every class.

How do I ask my doubts after the class?
You can get in touch with our student support team even after class hours or can drop a mail to our teaching assistants. You can also ask your doubts in the student discussion groups.

Can I see student profiles & reviews from previous batches?
Yes. Log on to our website and click on the student profile tab to see the student profiles & reviews from previous batches.

Can I pay the course fees in installments?
Yes. You can avail EMI options using the credit cards of almost every leading bank like ICICI, Kotak Mahindra Bank, Axis Bank, HDFC etc. You can check out details about this on our website.
COORDINATES

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