MAKE IT BIG WITH BIG DATA ANALYTICS

www.upxacademy.com
ABOUT US

Powered by IT major Tech Mahindra, UpX Academy is an ed-tech platform that provides professional training in Data Science, Artificial Intelligence & Big Data Analytics delivered by industry experts who have 7+ years of experience in the above areas.

Formulated by industry experts, our application based learning methodology allows one to integrate real-world projects to their profiles as they undergo training.
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<tr>
<td>09</td>
<td>Coordinates</td>
<td>42</td>
</tr>
</tbody>
</table>
OUR FACULTY

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

Google  Kabbage  ISB  Flipkart  genpact  IBM  HP  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

A GATEWAY TO A WORLD OF NEW OPPORTUNITIES

Telecom  HR  Banking & Finance  Retail  Healthcare  IoT  Social Media  E-Commerce
ARTIFICIAL INTELLIGENCE TRACK

12 weeks

MACHINE LEARNING FOR ARTIFICIAL INTELLIGENCE
- Additional Machine Learning Concepts*
- Applied Data Science with Python
- 3 w
- 9 w

21 weeks

DEEP LEARNING SPECIALIZATION
- Natural Language Processing
- Basics of Deep Learning
- Additional Machine Learning Concepts*
- Applied Data Science with Python
- 6 w
- 3 w
- 3 w
- 9 w

28 weeks

TECH MAHINDRA CERTIFICATION PROGRAM IN ARTIFICIAL INTELLIGENCE
- Deep Learning applications in industry
- Computer Vision
- Natural Language Processing
- Basics of Deep Learning
- Additional Machine Learning Concepts*
- Applied Data Science with Python
- 2 w
- 5 w
- 6 w
- 3 w
- 3 w
- 9 w

W - weeks

* Recorded
DATA SCIENCE TRACK

6 weeks
- Data analytics with Python
- Machine Learning

12 weeks
- Data analytics with Python
- Machine Learning
- Tableau

16 weeks
- Data analytics with Python
- Machine Learning
- Tableau

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

W - weeks

TECH MAHINDRA CERTIFICATION PROGRAM IN DATA SCIENCE

★★★

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

**Big Data Tracks**
- Hadoop
- Data analytics with Python

**Data Science Tracks**
- Spark
- Hadoop
- Machine Learning
- Data analytics with Python

12 weeks

31 weeks
- MongoDB, HBase, Sqoop & Flume (Recorded)
- Spark
- Hadoop
- Tableau
- Machine Learning
- Data analytics with Python

**SPECIALIZATION** ★

**ADVANCED** ★★★

**TECH MAHINDRA CERTIFICATION PROGRAM IN BIG DATA ANALYTICS** ★★★★★
PROJECTS

Uncover user hidden activity pattern that is using Facebook data

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

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

Analyse visa chances for Data Scientists under H1B category

Build a movie recommendation system using Machine learning methods
PROJECTS

Identify cancer using personalized machine learning product

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 FEES
## Tech Mahindra Certification Programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>Duration</th>
<th>Discounted Fee (After 01st December)</th>
<th>Discounted Fee (Till 01st December)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech Mahindra Certification in Big Data Analytics</td>
<td>6 Months</td>
<td>59000</td>
<td>50445</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Data Science</td>
<td>6 Months</td>
<td>59000</td>
<td>50445</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Artificial Intelligence</td>
<td>6 Months</td>
<td>61950</td>
<td>53100</td>
</tr>
</tbody>
</table>

Inclusive of GST

- Instructor-led weekend courses
- Next Batch Starts on 4th January
- Enrolment deadline is 01st December with current fee
- EMI options 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 UPXA16M on our website to avail discount on Tech Mahindra certification in Artificial Intelligence
Additional Discount on group enrolments
## ARTIFICIAL INTELLIGENCE TRACKS

<table>
<thead>
<tr>
<th>Courses</th>
<th>Duration</th>
<th>Discounted Fee (After 01st December)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Machine Learning for Artificial Intelligence</td>
<td>12 weeks</td>
<td>24780</td>
<td>24780</td>
</tr>
<tr>
<td>Deep Learning Specialization</td>
<td>21 weeks</td>
<td>49560</td>
<td>42480</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Artificial Intelligence</td>
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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
## DATA SCIENCE TRACKS

<table>
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<tr>
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<tbody>
<tr>
<td>Data Science Foundation</td>
<td>06 weeks</td>
<td>23600</td>
<td>18880</td>
</tr>
<tr>
<td>Data Science Specialization</td>
<td>12 weeks</td>
<td>35400</td>
<td>33984</td>
</tr>
<tr>
<td>Advanced Data Science</td>
<td>16 weeks</td>
<td>46020</td>
<td>39825</td>
</tr>
<tr>
<td>Tech Mahindra Certification in Data Science</td>
<td>24 weeks</td>
<td>59000</td>
<td>50445</td>
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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 UPXDSAD to avail discount on our website on advanced Programme
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# BIG DATA ANALYTICS TRACKS

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

Inclusive of GST
CAREER SUPPORT

- Placements in Tech Mahindra*
- Interview preparation guides
- 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
COURSE FEATURES

- **Curriculum**
  - Designed by experts to make you industry ready

- **Application based learning**
  - Theory
  - Hands-on
  - Case study
  - Project

- **Dedicated Student Support Team**
  - Beyond classroom hours

- **Industry specific projects**
  - BFSI, Retail, Healthcare, Entertainment, Airlines & Sports

- **Discussion forum**
  - Always buzzing with students interacting with each other
CERTIFICATION

LEVEL 1
CERTIFICATE OF COMPLETION

LEVEL 2
CERTIFICATION

Placement opportunity in Tech Mahindra from 2019*

* Terms & Conditions apply
CURRICULUM
ARTIFICIAL INTELLIGENCE
Module 06: Step into the world of Data Science

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 07: Introduction to Machine Learning

Module 08: Linear and Logistic Regression
Module 12: Support Vector Machine
Module 09: Linear and Logistic Regression
Module 10: Decision Tree and Random Forest
Module 11: Boosting
Week 05

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
Module 21: Introduction to Deep Learning

Module 22: Basics of tensorlow programming

Module 23: Introduction to Neural Networks

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

Module 26: Word Vectors & Representation

Module 27: RNN & CNN in Text Classification
Module 28: Transfer Learning in NLP
Module 29: Transformer Based Text Models - Elmo, GPT2 & Bert

Week 19

Module 30: Standard Text Problems - Classification, Entity Prediction, Sentiment Analysis

Week 20

Module 31: NLP Production Grade Use case

Week 21
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
Week 27  Module 39: Autoencoders & Generative Adversarial Nets

Week 28  Module 40: Model interpretability and AutoML in DL
DATA SCIENCE
# DATA SCIENCE - FOUNDATION

**Data Analytics with Python**

**DURATION : 6 WEEKS**

| Week 01 | Module 1: Data Science fundamentals  
|         | Module 2: Introduction to Python  |
| Week 02 | Module 3: Playing around with Python  
|         | Module 4: Introduction to Descriptive Statistics  |
| Week 03 | Module 5: Introduction to Probability and Distributions  
|         | Module 6: Introduction to Numpy  |
| Week 04 | Module 7: Data manipulation with Pandas  
|         | Module 8: Introduction to Inferential Statistics  |
| Week 05 | Module 9: Hands on with Inferential Statistics  
|         | Module 10: Data Visualization in Python  |
| Week 06 | Module 11: Exploratory Data Analysis  |
DATA SCIENCE - SPECIALIZATION

Machine Learning

DURATION : 06 WEEKS

FOUNDATION

Week 1  Module 01: Introduction to Machine Learning (ML)
         Module 02: Linear Regression

Week 2  Module 03: Logistic Regression
         Module 04: Decision trees & Random Forests

Week 3  Module 05: Model evaluation techniques and dimensionality reduction using PCA
         Module 06: KNN (K-Nearest neighbours)

Week 4  Module 07: Naïve Bayes classifier
         Module 08: K-means clustering technique

Week 5  Module 09: Support vector machines (SVM)

Week 6  Module 10: Time series forecasting
DATA SCIENCE - SPECIALIZATION
Data Visualization in Tableau
DURATION : 04 WEEKS

Week 01  Module 01: Introduction to Visual Analytics
         Module 02: Visual Analytics using Tableau

Week 02  Module 03: Introduction to data joins & blends in Tableau
         Module 04: Introduction to Predictive Analytics using Tableau and R

Week 03  Module 05: Introduction to Interactive Dashboard Design
         Module 06: Advanced Calculations using Tableau

Week 04  Module 07: Applications of advanced Calculations using Tableau
         Module 08: Revision of concepts and Project discussion
DATA SCIENCE - ADVANCED
Advanced Machine Learning (Recorded)
DURATION : 03 WEEKS

SPECIALIZATION

Week 01
Module 01: Introduction to Apriori Algorithm
Module 02: Recommender Systems

Week 02
Module 03: Linear Discriminant Analysis (LDA)
Module 04: Anomaly Detection

Week 03
Module 05: Ensemble learning
Module 06: Stacking
TECH MAHINDRA CERTIFICATION PROGRAM IN DATA SCIENCE

Deep Learning with NLP (Recorded)

DURATION : 05 WEEKS

Week 01  Module 01: Artificial Intelligence
          Module 02: Introduction to Deep Learning

Week 02  Module 03: Getting started with Tensorflow 2.0
          Module 04: Tensorflow programming in Python

Week 03  Module 05: Introduction to Convolutional Neural Networks
          Module 06: Introduction to Natural Language Processing

Week 04  Module 07: Recurrent Neural networks
          Module 08: Text Classification & Sequence Generation

Week 05  Module 09: Neural Machine Translation
DATA SCIENCE

Data Analytics with python, Machine Learning and Tableau

DURATION : 14 WEEKS

For Data Analytics with Python modules please refer to pg no. 31
For Machine Learning modules please refer to pg no. 32
For Tableau modules please refer to pg no. 33

BIG DATA

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)
BIG DATA

Spark

DURATION : 6 WEEKS

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
### BIG DATA

MongoDB, Hbase, Sqoop & Flume

**DURATION : 04 WEEKS**

<table>
<thead>
<tr>
<th>Week</th>
<th>Modules</th>
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<tbody>
<tr>
<td>Week 01</td>
<td>Module 1: Introduction to NoSQL</td>
</tr>
<tr>
<td></td>
<td>Module 2: Getting started with MongoDB</td>
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<tr>
<td>Week 02</td>
<td>Module 3: MongoDB Essentials - I</td>
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<tr>
<td></td>
<td>Module 4: MongoDB Essentials - II</td>
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<tr>
<td>Week 03</td>
<td>Module 5: Hands-on MongoDB</td>
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<tr>
<td></td>
<td>Module 6: HBase</td>
</tr>
<tr>
<td>Week 04</td>
<td>Module 7: SQOOP</td>
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<tr>
<td></td>
<td>Module 8: FLUME</td>
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</tbody>
</table>

- **Flume**
- **Spark**
- **MongoDB**
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</td>
<td>Data Science &amp; AI track</td>
<td>Sat &amp; Sun 08 AM - 10 AM IST</td>
</tr>
<tr>
<td></td>
<td>Big Data Analytics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sat &amp; Sun 11 AM - 1 PM IST</td>
</tr>
</tbody>
</table>

Do I have to purchase any software?
No, we provide necessary installation guides of the software required

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

What are projects?
Projects are real world datasets from companies like Nike, Yelp, Amazon, Netflix etc. that are provided to our students.
<table>
<thead>
<tr>
<th>What if I miss a class?</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can access recordings of all classes on our LMS Portal from the week following every class.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How do I ask my doubts after the class?</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Can I see student profiles &amp; reviews from previous batches?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes. Log on to our website and click on the student profile tab to see the student profiles &amp; reviews from previous batches.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Can I pay the course fees in installments?</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>
Student Service Team
info@upxacademy.com

Anirudh : anirudh@upxacademy.com  9873199944
Pradeep : pradeep@upxacademy.com  7358568359
Kashyap : kashyap@upxacademy.com  7675847450

Toll free number: 1800 - 123 - 1260