Learnbay

Master's Degree in CS:

Data Science & AI

In Collaboration with

\WOOLF UNIVERSITY/

Industry Partners

IBM Microsoft

Specialization in:

- Data Science and Data Analytics
- Artificial Intelligence and ML

Generative AI-Integrated Curriculum

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Learnbay's Excelvarsity X Woolf University

Learnbay's Excelvarsity Master's Degree in CS: Specialization in **Data Science & Analytics** | **AI & ML** is designed to help you excel in the growing fields of Data Science and AI. The ECTS credits are recognized in over **60+ countries**, and is equivalent to a Master's degree in the USA according to ECE.

At Learnbay's Excelvarsity, we're all about keeping your skills sharp while you earn your degree. Our affordable programs, flexible schedules, and lifetime access to study materials cover all aspects of our learners' professional development.

Globally Recognized Degree

Immigration Opportunities

Transferable ECTS Credits

Generative AI-Integrated Curriculum

Industry Certified Projects

Learn from top 1% industry experts

Program Details

COURSE PREREQUISITE

Prior knowledge of **programming/coding** is not mandatory. Just the urge to learn programming and basic ideas about advanced math is enough.

PROGRAM ELIGIBILITY

- BE/B.tech/M.tech ,MBA, BSC, BCA, BBA, Bachelor/Master in commerce.
- Minimum **60% marks** in aggregate in bachelor's degree

KEY FEATURES

- Domain Electives (BFSI, Retail, Supplychain, HR, Marketing, Healthcare)
- Dedicated Placement Cell | 100% Guaranteed Interview Calls
- Globally Recognised **Master's Degree** with 90+ ECTS credits

JOB ROLES TO TARGET

Get equipped with the industry relevant skills and aim for job roles like
Sr. Data Scientist, Machine Learning Engineer, AI Engineer, BI Developer,
Big Data Architect, Sr. Data Analyst etc.

Click below

Check Eligibility

Alumni Spotlight

Shravanthi A

Data Scientist

Learnbay has helped me a lot to learn data science applications in the e-commerce industry. The live class concept was really helpful in receiving proper DS training. Thanks to all my mentors and the placement team.

Mechanical Domain ➡ **Data Scientist @** Ford

230% Salary Hike

Preksha Mishra

Lead Data Scientist

The course structure is excellent with emphasis on concept building and tools & software at the same time. The support team is excellent and supportive and quite agile to respond to doubts.

Telecom Domain ➡ **Data Scientist @** HCL

140% Salary Hike

Karan Chawala

xceedance

⬇

EXL

Data Scientist

Jaya Sinha

Aditya Birla Group

⬇

Infosys

Senior Analyst

Shubham Dev

publicis sapient

⬇

brillio

Lead Data Analyst

Alumni Spotlight

Mohd. Israr

Data Scientist

Thanks to the Learnbay data science course & excellent guidance, I was able to ace the TCS interview and secure a job with a 210% pay raise. The real-world time projects helped me develop my concepts as a data scientist.

Mechanical Domain ➡ **Data Scientist @** TCS

210% Salary Hike

Saurabh Kumar

Data Scientist

When I joined Learnbay I did not have any knowledge apart from the very basics. I gradually build my concept via various trainers and get trained in data science with strong knowledge/concepts.

Mathematics Professor ➡ **Data Scientist @** Teleperformance

135% Salary Hike

Aravind

TheMathCompany ⬇ CATERPILLAR

Senior Data Scientist

Ritesh Kumar

unacademy ⬇ Capgemini

Data Scientist

Ramki

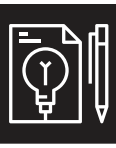
cognizant ⬇ ANBSYSTEMS energizing solutions

Data Analyst

Learnbay's ProjectLab

Choose Learnbay for your career journey because we're more than just a training provider. Our Project Innovation Lab lets you apply your skills in real-world scenarios. Get **dual certifications** for a competitive edge. Specialize in your desired domain. Discover how Learnbay can boost your career growth. Don't settle for less – choose Learnbay, your path to success!

1 Project Innovation Lab



Work in an industry-like environment and gain practical hands-on experience of data scientist with dedicated mentors from industry.

2 Domain Electives

Enhance career prospects and excellence in your chosen field with our domain electives.

3 Dedicated Placement Cell

Experience 100% job assistance with guaranteed interview calls from leading MNCs and startups globally.

4 Degree & Certification

Gain top-notch skills for a successful career through our degree and certification program

1 Project Innovation Lab

Learnbay's Project Innovation Lab replicates industry-like environment for real time projects. With our **ProjectLab,** you gain real proof of hands-on experience by having your project certified by the industry.

In our ProjectLab, you work like a data scientist with dedicated project mentors from industry and get certified on capstone projects.

450+
Hiring Partners

PUNE

1-1 Doubt Session

HYDERABAD

Capstone Project Certificate from IBM

35k
Trusted Learners

DELHI

BENGALURU

Project Innovation Labs Across India

2 Domain **Electives**

We offer Domain Electives for various industries including BFSI, Retail, Healthcare, Manufacturing, and Supply Chain. This ensures that you gain expertise directly relevant to your current domain.

With our program, you can make your past domain experience relevant and position yourself for a significant salary hike.

BFSI

Advanced analytics for risk assessment and fraud detection in finance.

Brochure

Healthcare

Data-driven insights for improved patient care and medical research.

Brochure

Manufacturing

Optimising operations with data analytics and predictive maintenance solutions.

Brochure

Supplychain, E-com & Retail

Enhancing supply chain visibility and customer experience with data.

Brochure

For Managers & Leaders

Mastering data-driven decision-making with strategic insights.

3 Career Service PRO

Get 3 years of Job and Placement support

Unleash your career potential with unlimited job access, interview support, and profile review

6 Mock Interviews with Industry Experts

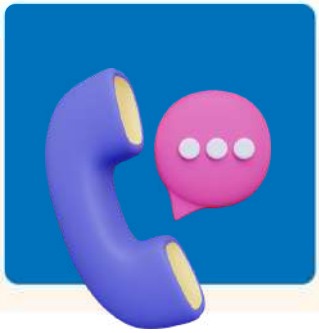
Master the art of data science & AI and stay ahead of the curve with mockups and industry insights

Resume Building Session

Craft a powerful resume showcasing your expertise in software development to stand out from the competition

1:1 LinkedIn Review Session

Get 1-on-1 sessions with experts for a better understanding of LinkedIn profile reviews and cover letter

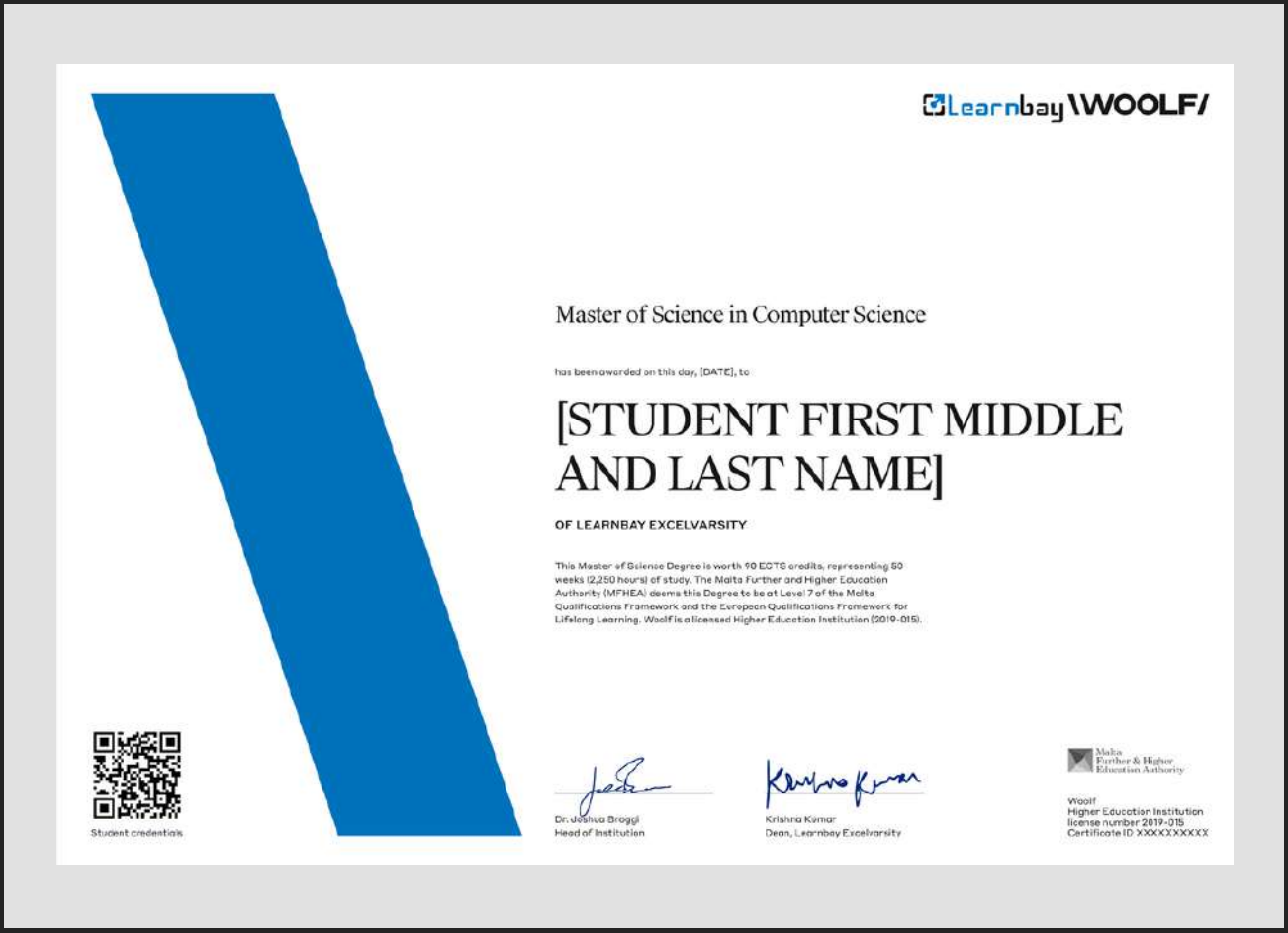


Dedicated Placement Cell

Receive unlimited interview calls from a diverse pool of interested employers/recruiters until you successfully secure a job

4 Degree & Certificate

Earn a globally recognised master's degree along with capstone certification from industry.



Project Certification from IBM

- Gain real proof of hands-on experience by having your project certified by the industry
- Get your project work recognized and certified directly by industry leaders.

Others Vs Learnbay

	Learnbay	Others
Guaranteed Interview Calls	✓	✗
Industry capstone project certificate from IBM	✓	✗
Domain specialized programs for professionals	✓	✗
100% live interactive sessions with industry experts	✓	✗
On-demand video call with industry experts	✓	✗
Personalised Resume Review Session	✓	✗

Program Fee & Financing

Scholarship

Scholarships are awarded based on profile review. Eligible candidates can avail upto 25% scholarship on desired courses. Click the button below to apply.

Click below

Check Scholarship Eligibility

Financing as low as

Rs. 15,980 /month

No Cost EMI

Razorpay

LIQUILOANS

PropelId

ShopSe

Program Fee

Rs. 3,25,000/-

exclusive of GST

Learning Path

L1 **Foundation Track**

Special programming class, Python For Data Science

10 ECTS Credits

L2 **Statistics & ML**

Mathematics for CS, Machine Learning

20 ECTS Credits

SPECIALIZATION

60 ECTS Credits

Data Science & Data Analytics

L3 **Data Analytics & Visualization**

Data visualization tools (Advance tableau, PowerBI, Looker)

L4 **Deep Learning & Generative AI**

- Introduction to deep learning
- Generative AI

L5 **Industry-Specific Data Analytics**

Domain electives (BFSI, Healthcare, E-Commerce, Supplychain, etc)

Artificial Intelligence & Machine Learning

L3 **Deep Learning & Advanced Data Analysis**

Advance deep learning, NLP, computer vision & reinforcement learning

L4 **Comprehensive Data Structures Overview**

Lists, Queues, Stacks, Trees, Graphs, Hash Table

L5 **Industry-Specific Data Analytics**

Domain electives (BFSI, Healthcare, E-Commerce, Supplychain, etc)

Program Syllabus

TERM 1

Foundation Track

10 ECTS Credits

Python Fundamentals

- Programming Basics & Environment Setup
- Python Programming Overview
- Strings, Decisions & Loop Control
- Python Data Types
- Functions And Modules

Class hands-on: 8+ Programs to be covered in the functions, Lambda, modules, Generators, and Packages class File I/O And Exceptional Handling and Regular Expression Class hands-on: 10+ Programs to be covered in class from File IO, Reg-ex and exception handling

Numerical Programming

- Data Analysis Using Numpy
- Data Analysis Using Pandas
- Data Visualization using Matplotlib
- Data Visualization using Seaborn

Case Study on Numpy, Pandas, Matplotlib.
1 Case Study on Pandas And Seaborn

NumPy pandas seaborn matplotlib

Download Detailed Curriculum

Program Syllabus

TERM 2

Statistics & Machine Learning

20 ECTS Credits

Applied statistics

- Data Visualization Basics
- Descriptive Statistics
- Z- Score Method
- Sampling
- Probability and Distribution
- Bayes Theorem
- Hypothesis Testing
- Error and ANOVA
- Linear Algebra

Statistics Assignments: Total 4 practice sets and Assignments from Statistics

Introduction to Machine Learning

- Introduction to Machine Learning
- Linear Regresssion
- Logistic Regression
- Decision Tree
- Cross validation
- KNN
- Naive Bayes

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Program Syllabus

TERM 2

Statistics & Machine Learning

20 ECTS Credits

Advance machine learning

- Clustering
- PCA
- SVM
- Time Series

Case Study on Recommendation Engine for e-commerce/retail chain & Twitter data analysis using NLP

Problem-Solving Techniques

- Understanding the Problem
- Pseudocode and Flowcharts
- Divide and Conquer
- Data Collection and Integration
- Different Types of Analysis
- Backtracking
- Debugging Techniques
- Machine Learning Pipelines

Download Detailed Curriculum

Program Syllabus

TERM 3

SPECIALIZATION - I

DATA SCIENCE AND DATA ANALYTICS

Data Analytics & Visualization

20 ECTS Credits

Spreadsheets for Data Understanding

- Basics of Excel
- Formatting a worksheet
- Adjusting row height & column width ,changing cell alignment
- Managing your workbooks
- Advanced Printing options
- Formulas
- Conditional Formatting
- Data analysis and pivot tables
- Automating tasks with macros
- Using excel events to triggers macros

Relational database - SQL fundamentals

- Introduction to SQL, RDBMS & DBMS
- Normalization & Constraints
- Working with joins & clause
- Working with functions
- Transaction, sequence & triggers

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Program Syllabus

TERM 3

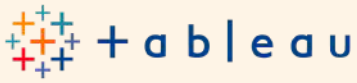
Data Analytics & Visualization

20 ECTS Credits

Data visualization tools (Adv. Tableau, PowerBI, Looker)

Tableau (Advance)

- Introduction to Tableau
- Adding Parameters
- Manipulating Graph Size
- Dashboard actions
- Story point
- Connecting to SQL server



Getting Started With Power BI

- Introduction & Installation
- Creating visuals
- Advanced charts
- PowerBI services
- Data modelling

Google Looker

- Introduction to Looker
- Data Modelling
- Data exploration with LookML
- Advanced data modelling techniques

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Program Syllabus

TERM 3 & 4

Data Analytics & Visualization

20 ECTS Credits

Business case studies

- Transportation safety domain
- HR domain
- Medical survey
- Sales
- Sports Analytics

Deep Learning & Applied Analytics

20 ECTS Credits

Introduction to deep learning

- Introduction to Deep Learning
- MLP Architecture
- Weight Initialization
- Deep learning algorithms
- Exponentially Weighted Moving Average (EWMA)
- Padding
- Pooling
- Sequential API

Product Analytics

- Product Usage Onboarding
- A/B Testing Techniques
- Online Platform Metrics
- Customer Experience Mapping
- Marketing Performance Analysis
- Google Analytics for Beginners
- Google Analytics Reporting Techniques
- Data Pre-processing with Google Analytics

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Program Syllabus

TERM 4

Deep Learning & Applied Analytics

20 ECTS Credits

Productionization of ML systems

- Introduction to ML Deployment
- Model Serialization
- Containerizing ML Models
- Cloud Deployment: AWS SageMaker
- Cloud Deployment: Azure ML Service
- Cloud Deployment: GCP AI Platform
- Optimizing Models for Deployment
- Feedback Loops in ML Deployment
- Cost Management in ML Deployment
- Specialized Hardware for Deployment
- Recap and Future Trends in ML Deployment

aws Azure Google Cloud Platform

Generative AI

- Introduction to Generative AI
- Introduction to Generative Adversarial Networks (GANs)
- Introduction to Variational Autoencoders (VAEs)
- Introduction to Transformer Models in Generative AI
- Ethical Implications and Challenges

Midjourney ChatGPT DALL·E

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Program Syllabus

TERM 3

SPECIALIZATION - 2

ARTIFICIAL INTELLIGENCE & ML

Deep Learning & Advanced Data Analysis

20 ECTS Credits

Introduction to Deep Learning

- Introduction to Deep Learning
- MLP Architecture
- Weight Initialization
- Deep learning algorithms
- Exponentially Weighted Moving Average (EWMA)
- Padding
- Pooling
- Sequential API

Deep learning for computer vision

- Introduction to Computer Vision
- Image Filtering and Enhancement
- Image Recognition
- Semantic Segmentation

Deep learning for natural language processing

- Natural Language Toolkit
- Stemming
- N-GRAMS
- Spacy
- Word2Vec
- NLP Spacy

spaCy

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Program Syllabus

TERM 3

Deep Learning & Advanced Data Analysis

20 ECTS Credits

High Dimensional Data Analysis

- Introduction to Big Data
- Data Locality
- SQOOP (SQL in HADOOP)
- Map Reduce
- Spark
- Persisting RDD

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Program Syllabus

TERM 4

Deployment & Gen-AI

15 ECTS Credits

Generative AI

- Introduction to Generative AI
- Probabilistic Graphical Models
- Introduction to Generative Adversarial Networks (GANs)
- Introduction to Variational Autoencoders (VAEs)
- Ethical Implications and Challenges
- Advanced Topics and Recent Trends

Product Analytics

- Product Usage Onboarding
- A/B Testing Techniques
- Online Platform Metrics
- Customer Experience Mapping
- Marketing Performance Analysis
- Google Analytics for Beginners
- Google Analytics Reporting Techniques
- Data Pre-processing with Google Analytics

Productionization of ML systems

- ML Deployment Lifecycle
- Model Serialization
- Cloud Deployment: AWS SageMaker
- Cloud Deployment: Azure ML Service
- Cloud Deployment: GCP AI Platform
- Model Versioning

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Program Syllabus

TERM 5

Comprehensive Data Structures

15 ECTS Credits

Essential Data Structures: Lists, Queues, Stacks

- Introduction to Data Structures & Lists
- Array vs. Linked List
- Introduction to Stacks
- Applications of Stacks
- Double-Ended Queue (Deque) Introduction
- Applications of Queues

Advanced Data Structures: Trees, Graphs, Hash Tables

- Binary Trees
- Binary Tree Traversals
- B-Trees & B+ Trees
- Depth First Search (DFS)
- Breadth First Search (BFS)
- Shortest Path Algorithms - Dijkstra's Algorithm
- Shortest Path Algorithms - Bellman-Ford Algorithm
- Minimum Spanning Trees - Prim's Algorithm
- Minimum Spanning Trees - Kruskal's Algorithm
- Graphs: Strongly Connected Components
- Introduction to Hashing
- Advanced Hashing Techniques
- Applications of Hash Tables
- Advanced Hashing: Consistent Hashing
- Graphs: Traveling Salesman Problem

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Real-time Projects

J.P.Morgan

12 hours

Learn and develop classification techniques for the digital transformation of banking

JPMorgan offers tax-friendly insurance choices. You can help them forecast insurance premiums. Targeted marketing using your Random Forest Algorithm skills can help obtain better premium values.

python pandas scikit learn

NETFLIX

17 hours

Building a content recommendation model on the basis of regional viewer categorization

Netflix is a global entertainment video streaming site. They offer content in various regional languages. Build a local recommendation engine for Netflix customers residing in south Bangalore on their weekend and weekday activities, utilizing NLP.

NumPy SQL jupyter

OLA

18 hours

Reduction of waiting time via a highly precise forecasting model

Make a demand forecasting model based on specific time period rider demands. Such a model will help both riders and cab drivers to ensure the least possible waiting time. You can include measures like latitude and longitude identification.

python TensorFlow APACHE Spark

أرامكو السعودية saudi aramco

14 hours

Understanding in-depth about logging while drilling (LWD) technique

Saudi Aramco company is working on the development of high-efficiency drilling models. Use the bright sides of big data analytics to identify the most cost-effective and highly productive drilling sites.

hadoop matplotlib aws

Real-time Projects

19 hours

Career progression planning of employees with workforce defections and efficiency

IBM intends to boost its HR department by identifying employees' masked inconsistency. They need models to identify the graphical variations in their 14000+ employees' performances. Help them build models with your regressions and other ML abilities.

python pandas scikit learn

21 hours

Descriptive study of trends and irregularities with prediction analysis for conversion

Swiggy seeks a broad marketing campaign. But they need automated keyword generation tools & proper message preparation and delivery of the same to the right audience at the right time. Help them with text analytics and NLP-based keyword research.

TensorFlow SQL jupyter

17 hours

Forecasting future sales with trends and price maximization

BMW customers can sell old vehicles, but rivals provide superior resale prices. BMW's data science-powered software will deliver the greatest market value for used vehicles based on Km travelled, daily price changes, production dates, etc. Such tasks build analytical abilities.

Keras GitHub scikit learn

13 hours

Understanding covid-19 cases and fatality rate by time series forecasting

Samsung will launch a new healthcare app soon. The key goal of this app is an accurate human activity tracking and providing relevant health-related recommendations. Continuous analysis of a massive amount of mobile data is required for such an app.

python matplotlib Azure

Real-time Projects

10 hours

Churn forecasting for the telecom industry using Python programming with Machine Learning

The goal of this project is to design a precise customer churn prediction model. Based on the same, Jio can identify the exact reason for customer dissatisfaction and work accordingly.

ggplot2 git XGBoost

18 hours

Recommendation system with Customer Lifetime Value (CLV) analysis

Amazon wants to find the most successful electronics. Live consumer reviews are needed. Using data visualisation, help regenerate consumer insights from ongoing and current reviews.

python SQL jupyter

20 hours

Condition-based preventative maintenance and fault prediction in depth

This project helped BOSCH to predict their internal failures by production line dataset analysis. But still, they are struggling to predict automated faults in their assembly stage. Help them by building more advanced predictive models for assembly stage monitoring.

python TensorFlow scikit learn

15 hours

Automated inventory monitoring for supportable supply chain management

An automated inventory management system will keep track of stock levels and upcoming orders. In addition, you can contribute to DataCo's intelligent supply chain software generation project by using ML algorithms and Python programming skills.

jupyter NumPy pandas

Contact Us

Click here to whatsapp

or call us at
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www.learnbay.co