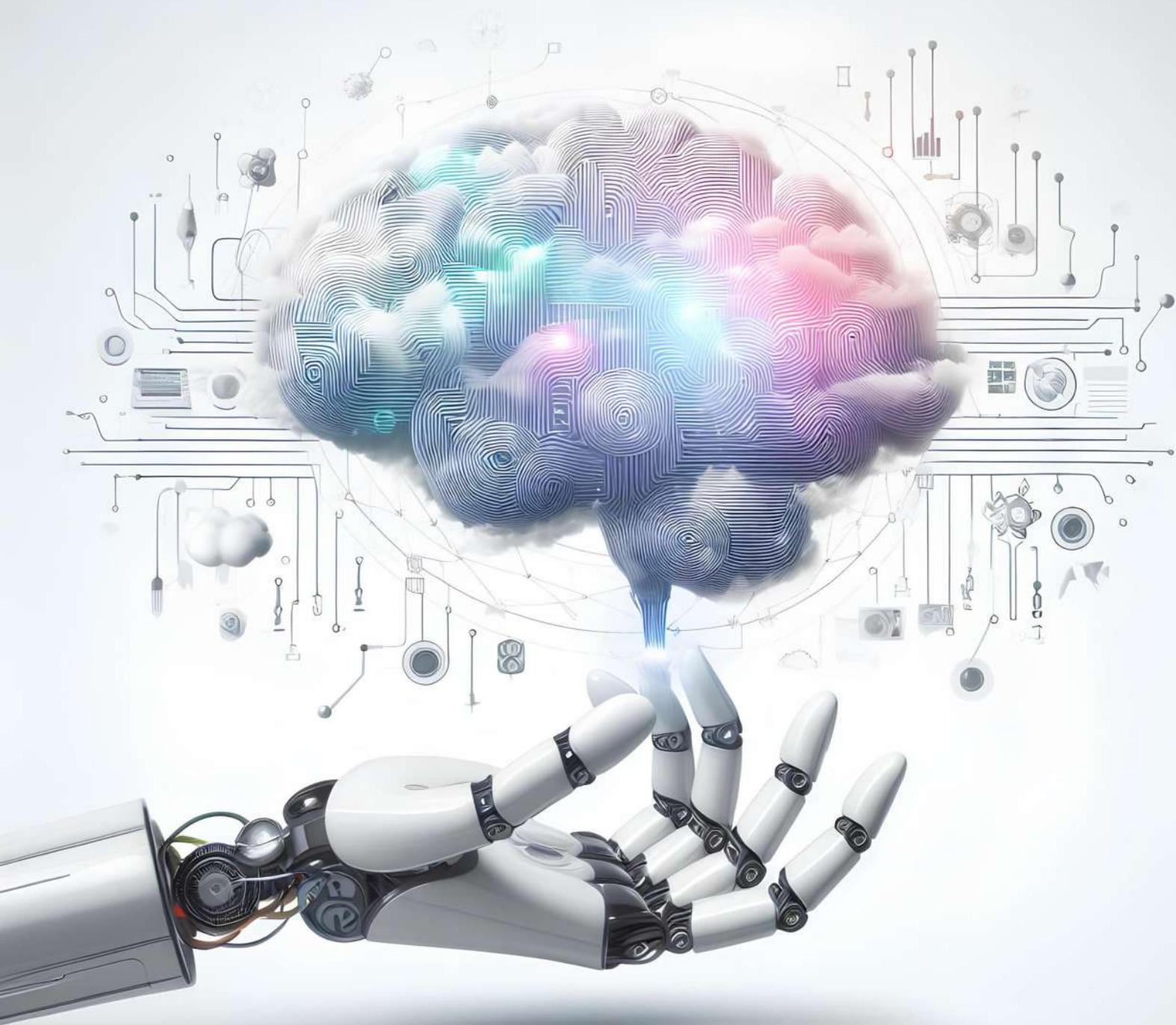# Mastering Artificial Intelligence:

A Comprehensive Course Syllabus

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ARTIFICIAL INTELLIGENCE
Course Mission

SevenMentor Institute leads the way in providing cutting edge IT Training and Skill Development across India. We have strived to establish an ideal learning atmosphere at all our training centers. We prepare our students to become dependable future professionals. Our institute aspires to promote universal access to learning for students. To achieve our mission of promoting better learning we invite all students to enroll in our Artificial Intelligence Course. Join us today to make a fulfilling career in Artificial Intelligence.

ARTIFICIAL INTELLIGENCE STATISTICS:

INDUSTRY
INSIGHTS

85% Companies will use some form of Python based Application

55% Year on Year Growth For All Artificial Intelligence Jobs

Learn Artificial Intelligence and
Be in Demand Always!

Artificial Intelligence (AI), the Prometheus of the digital era, is the science of creating machines that can think, reason, and perform tasks that typically require human intelligence. It's the realm where computers become our ingenious companions, deciphering complex problems, and even, at times, challenging the boundaries of human cognition. From chatbots that converse like friends to AI-driven medical diagnoses and autonomous drones, AI is the wizardry that's transforming our world. In the realm of AI, algorithms become our digital muses, painting vivid landscapes of possibility. So, prepare to journey into the extraordinary world of AI, where every line of code births a new spark of intelligence, and the future is limited only by our imagination!

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Embrace the Power of AI:
Become Omnipresent

Your Odyssey to Mastering the Language of Intelligence. If your ambition is to achieve mastery in Artificial Intelligence, a field celebrated for its boundless potential and wide-ranging impact, it's imperative to embark on a journey of perpetual growth and proficiency in this dynamic discipline. Artificial Intelligence is acclaimed for its adaptability and extensive reach across numerous domains, empowering enthusiasts to create a wide array of intelligent, innovative, and transformative solutions.

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04

Be Prepared For Every Scenario!

Gain practical Artificial Intelligence experiences
through well designed
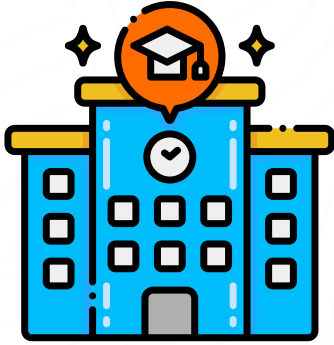
Experienced Faculty

Flexible Scheduling
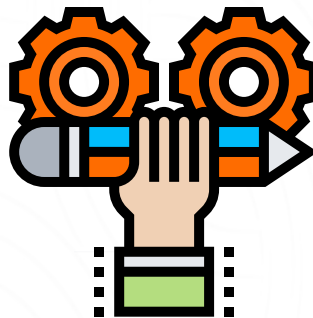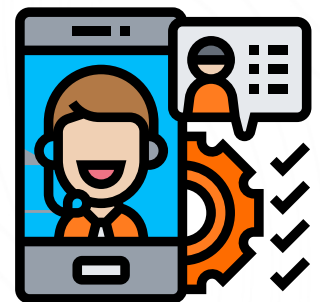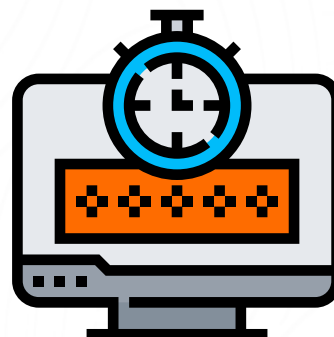
Hands-On Learning

Mock Interview Sessions

Real-World Projects

Career Support

Comprehensive Curriculum

Lifetime Access

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05

History of Neural Networks:

- Who invented Neural Network?
- What is the intuition of a Neural Network?
- What is a perceptron?
- Connecting Logistic Regression, Linear Regression with Perceptron
- Multi Layer Perceptron
- Training of a Perceptron
- MLP and Backpropogation)
- Notation
- Training a MLP:Chain Rule
- Training a MLP:Memoization
- Back propogation
- Activation Functions
- Sigmoid
- Tanh
- RELU
- Vanishing gradient

Deep Multi LayerPerceptrons :

- Dropout and Regularisation
- Batch Normalisation
- Batch SGD with Momentum
- Adam
- Softmax and Cross-Entropy
- How to train Deep MLP?
- Tensorflow and Keras Overview
- Install Tensorflow
- Softmax Classifier on MNIST data
- Code Walkthrough of MLP
- Hyperparameter Tuning in Keras
- Introduction to CNN :
- Introduction to CNN(Convolution Neural Network)
- What is Convolution?
- (Convolution:Padding and Strides
- Convolution over RGB images
- Max Pooling
- CNN Training

Introduction to CNN Continues :

- AlexNet
- VGGNet
- Residual Network
- Inception Network
- What is Transfer Learning?
- Code Walkthrough of CNN

Introduction to RNN :

- Why RNN(Recurrent Neural Network)?
- Training RNN
- Types of RNN
- Need of LSTM
- STM(Long Short Term Memory)
- Deep RNN
- Bidirectional RNN
- Code Walkthrough of RNN

Introduction to NLP :

- What is NLP(Natural Language Processing)?
- BOW(Bag of Words)
- Text Preprocessing: Stemming and Lemmatisation
- Stop Word Removal
- Tokenisation
- Unigram, Bigram, Ngrams
- TF-IDF
- Weighted TF-IDF
- Word2Vec(W2V)
- Code Walkthrough of NLP Techniques

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Deep Learning Project :

- Business Problem Contraints
- Data Collection
- Formulate Business Problem to Deep Learning Problem
- Data Cleaning
- Data Preprocessing
- EDA (Exploratory Data Analysis)
- Feature Extraction
- Modelling
- Evaluating the Performance of the models
- Retrain if necessary

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Get Skills To Fulfill Every Role:

Every student at **SevenMentor** gets personalized guidance, Mentorship, and ample opportunities to address individual questions and concerns. All our sessions are designed to be engaging, interactive, and tailored to your learning pace, ensuring you grasp each concept with clarity.

Nishesh Gogia

He is passionate about cutting edge technologies in Machine Learning and AI.He is also leading the Project Team and has implemented a chatbot for the company.He is a student of IIT Madras.

Aniket Kulkarni

He have theorotical as well as practical experience in the field of ML. He did M Tech and have 10+ years of Industrial and Academic experience.
Currently working as Data Science Trainer. He have trained 2000 + professionals and students for the course of Python, SQL, Power BI, Machine Learning and Deep Learning.

Suraj Kale

He is experienced With an extensive 8+ year track record, he stands as a seasoned Data Scientist. His expertise lies in delivering all-encompassing training encompassing data analytics, machine learning, and statistical modeling for professionals. Renowned for his knack for unraveling intricate concepts, nurturing practical skills, and propelling learners to excel in the data-dominated corporate realm.

Karishma Pawar

Karishma holds a PhD in Computer Engineering, specializing in cutting-edge fields including Artificial Intelligence and Machine Learning. In addition to more than 8 years of experience in Data Science, remarkable publications in peer-reviewed journals and conferences are to her credit. She has previously worked with Avaya and Infosys, and demonstrated a commitment to advancing the frontiers of knowledge.

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Get Skills To Fulfill Every Role:

Our **Artificial Intelligence** Courses are designed for a wide range of people looking for skills and opportunities across all major **IT** sectors

Hands-On Projects: Gain practical experience by working on real-world projects, building a robust portfolio that will impress potential employers.

Career Support: We're dedicated to your success! Benefit from career guidance, resume building, interview prep, and job placement

Flexibility: Our flexible schedule options allow you to learn at your own pace, making it perfect for both beginners and experienced developers looking to upskill.
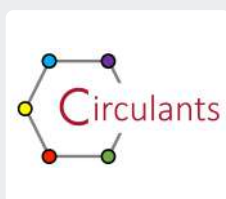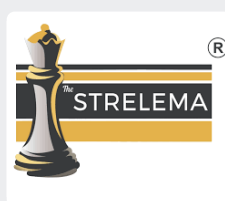
Community: Join a vibrant community of like-minded learners, where you can collaborate, share ideas, and network with peers.

Our Students are at reputed Tech Companies

Company logos: BAJAJ FINSERV, GT FINANCIAL SERVICES, INFERYX, The STRELEMA, pivotchain, LONAR TECHNOLOGIES, Simplify Healthcare, OMFYS, Scymes, KALA Genset Source of Power, Altum Credo Home Finance, iNFOWORLD THE SOFTWARE PEOPLE, NABLA INFOTECH, Circulants, SRV media Insights | Ideas | Impact, Rabbit&Tortoise TECHNOLOGY SOLUTIONS, NIMAP INFOTECH FOCUS TO REDEFINE, Integs Cloud
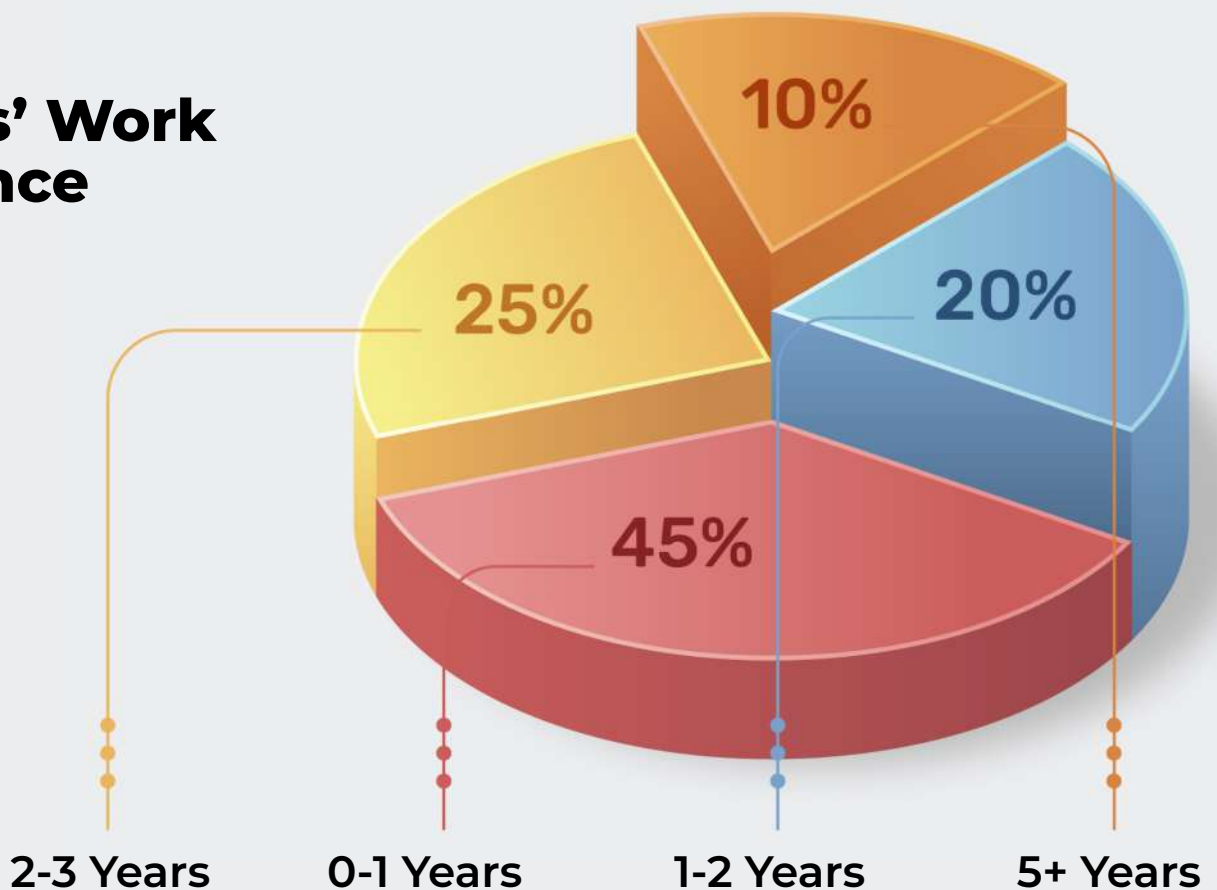
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ARTIFICIAL INTELLIGENCE JOBS ARE ALSO VERY STABLE!

The demand for **Artificial Intelligence** professionals is growing rapidly, so there is a lot of job security in this field. This can be a great motivator for people who are looking for a stable career.
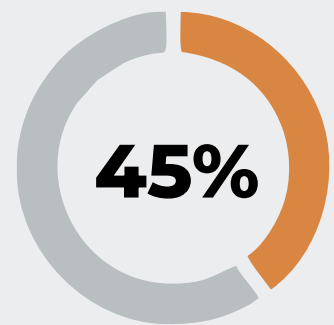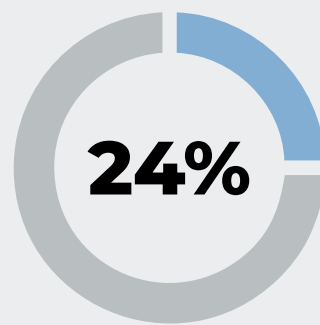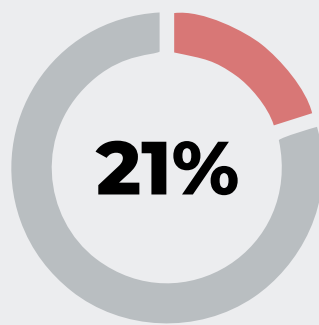
Learners' Industry Background

- Others — 65%
- Product — 10%
- Services — 25%
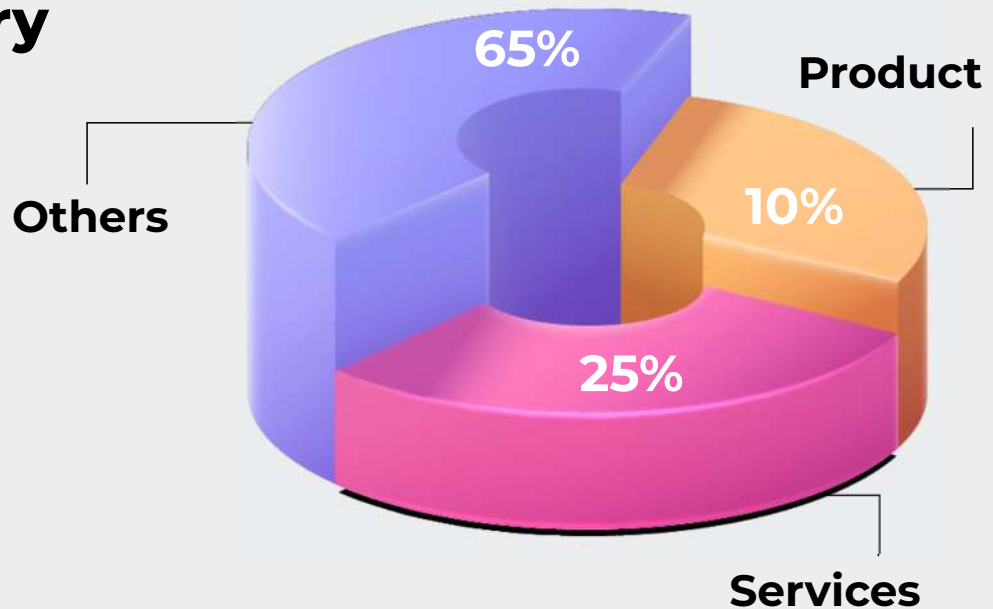
Learners' Work Experience

- 2-3 Years — 25%
- 0-1 Years — 45%
- 1-2 Years — 20%
- 5+ Years — 10%

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11

Learners' Expertise

- ■ Non-IT and Others
- ■ Tech
- ■ Artificial Intelligence
- ■ Professionals

10% **21%** **24%** **45%**
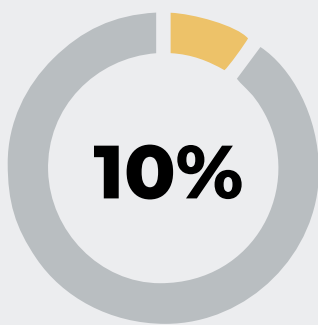
BOOST YOUR CAREER TO NEW HEIGHTS:

The global Artificial Intelligence job market is expected to grow by 44% from 2021 to 2030, creating 3.5 million new jobs.
In India it is expected that 309,000 new Artificial Intelligence jobs will be available by 2030, accounting for 9% of the global demand.
The average salary for an Artificial Intelligence professional in India is approximately Rs. 8 to Rs. 10 Lakhs per annum.

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CAREER GRAPH

Principle Data Scientist

Executive-level position responsible for setting the vision and strategy for data science.

Machine Learning Engineer

Junior to senior-level position responsible for designing, building, and deploying machine learning models in production.

Senior Data Scientist

Senior-level position responsible for leading data science projects, mentoring junior data scientists.

Data Scientist

Mid-level position responsible for analyzing and interpreting complex data, creating models, and presenting findings to stakeholders.

Data Analyst

Entry-level position responsible for collecting, processing, and performing statistical analysis on data.

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Affordable Training without Compromise:

We recognize that achieving your aspirations in the realm of Artificial Intelligence should not come with a hefty price tag. At our institution, we have made affordability a fundamental principle of our Artificial Intelligence Course. We are dedicated to the idea that top-tier education should be within reach for all individuals, and our course design reflects this very philosophy. Our Artificial Intelligence Course promises to take you on an enthralling educational voyage, all while maintaining a remarkably budget-friendly cost.

- -

HOW TO START YOUR nce CAREER?

- Enroll at **SevenMentor Institute**

- Get hands-on training from **Experienced Teachers**

- Receive Industry-recognized **Artificial Intelligence Certification**

- Work for leading **MNCs** through our **on-campus interviews**

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WE ARE THERE FOR YOU

If you are interested in learning more about Artificial Intelligence training, please contact us. Our team would be happy to answer any questions you have and help you find the right training for you.

Request For Call Back

📞 **020 7117 1500**