



National Career Service

सही अवसर, सही समय
Right Opportunities, Right Time

CAREER IN ARTIFICIAL INTELLEGENCE, MACHINE LEARNING AND DEEP LEARNING



**Government of India,
Ministry of Labour and Employment,
Directorate General of Employment,
National Institute of Career Service,
Noida , Uttar Pradesh.**

August 2024

CAREER IN ARTIFICIAL INTELLIGENCE (AI), MACHINE LEARNING (ML), AND DEEP LEARNING (DL)

INTRODUCTION

The entire world is marching ahead very fast with emerging technologies like Artificial Intelligence, Machine Learning and Deep Learning, with the rapid progress in research and development in this sector as well as in implementation of the products and models generated using AI/ ML/ DL, the field offers immense potential in the upcoming days to the young and bright brains of the era.

Artificial Intelligence is a branch of Computer Science dealing with simulation of intelligence behaviour in Computer. It means to simulate intelligence behaviour, Artificial intelligence is applied when a machine mimics a cognitive function of human brain which include perception, the ability to hear or become aware of something through senses, memory, learning, attention, decision making and language ability. Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL) are rapidly growing fields with a wide range of career opportunities. These technologies are transforming industries by enabling machines to learn from data, make decisions, and perform tasks that typically require human intelligence

WHY CHOOSE AI/ ML AS A CAREER ?

- ❖ **High Demand:** As proficiencies in the field of Artificial Intelligence, Machine Learning and Deep Learning are in high demand, organizations worldwide seek AI and ML experts to drive innovation and lead the market.
- ❖ **Lucrative Salaries:** As Artificial Intelligence and Machine Learning require good number of skills, proficiencies with analytical abilities. Companies hire experts in AI and ML with very high salary package.
- ❖ **Endless Possibilities:** The Possibilities of Artificial Intelligence, Machine Learning and Deep Learning are endless, from self-driving cars to personalized medicine, the applications are limitless.

QUALIFICATION AND SKILL SETS REQUIRED

Bachelor's Degree: Computer Science, Engineering, Mathematics, or related fields.

Master's/Ph.D.: Advanced degrees in AI, ML, DL, or related specializations are highly valued.

TECHNICAL SKILLS:

Programming Languages: Python, R, Java, C++. Frameworks and

Libraries: TensorFlow, PyTorch, Keras, Scikit-learn.

Mathematics and Statistics: Strong foundation in linear algebra, calculus, probability, and statistics.

Data Handling: Proficiency in data preprocessing, data visualization, and big data technologies.

Soft Skills:

Problem-Solving: Ability.

SCOPE IN AI AND ML

Field	Job Roles	Average Annual Salary (INR)	Skills Required
AI	AI Engineer AI Product Manager Data Scientist NLP Engineer	₹8,00,000 - ₹20,00,000+	Programming (Python, R), AI frameworks (TensorFlow, PyTorch), Data Analysis, NLP
ML	Machine Learning Engineer Data Engineer Research Scientist	₹6,00,000 - ₹18,00,000+	Programming (Python, Java), ML algorithms, Data Mining, Statistical Analysis
DL	Deep Learning Engineer Computer Vision Engineer Research Scientist	₹7,00,000 - ₹22,00,000+	Neural Networks, DL frameworks (Keras, TensorFlow), Computer Vision, Image Processing

COURSES IN AI,ML AND DL

University/College	Course Name	Eligibility
IIT Bombay	B.Tech, M.Tech, M.S. in AI/ML	10+2/B. Tech./ BE
IIT Delhi	B.Tech, M.Tech, Certificate Programs	10+2/B. Tech./ BE
VIT Vellore	B.Tech, M.Tech in AI/ML	10+2/B. Tech./ BE
IIT Madras	B.Tech, M.Tech, PG Certificate Programs	Relevant qualifications
IIIT Bangalore	Executive PG Diploma, PG Programs	Relevant qualifications
IIT Roorkee	Advanced Certificate Program, M.Tech, B.Tech	Relevant qualifications
Amrita Vishwa Vidyapeetham	B.Tech, M.Tech in AI/ML	10+2 (Science/Maths)
BITS Pilani	Post Graduate Programme (WILP)	Relevant qualifications
Lovely Professional University (LPU), Punjab	B.Tech, M.Tech in AI/ML	10+2 (Science/Maths)
SRM Institute of Science and Technology, U.P.	B.Tech, M.Tech in AI/ML	10+2 (Science/Maths)

SHORT TERM COURSES IN AI AND ML

Course Name	Fees (INR)	Duration	Basic Requirements	Contact /Email
NICS , Noida	Free	3 Weeks	Graduate	nicsnoida-cirtes[at]gov[dot]in, cirtesnoida[at]gmail[dot]com, nicsnoida.trg[at]gmail[dot]com
IIT Kanpur AIML Certification	₹15,000	4 weeks	No prior programming experience required	Email: mimo5G.iitk@gmail.com
Great Learning's AI and ML Courses	Varies	Varies	Basic understanding of programming	Great Learning web Portal

OTHER TRAINING PROVIDERS OFFERING COURSES IN AI, ML AND DL.

Course Name	Fees (INR)	Duration	Basic Requirements	Contact /Email
IFACET Professional Certificate Course in AI and ML	₹12,000	3 months	Basic understanding of mathematics and programming	<u>IFACET AI and ML Course</u>
Coursera's AI for Everyone	Varies (Free to ₹5,000)	6 hours	None specified	<u>Coursera's website</u>
Google's Machine Learning Crash Course (MLCC)	Free	Self-paced	Basic programming knowledge	<u>mlcc2020applications@gmail.com</u>
UpGrad's PG Certification in Machine Learning and AI	₹1,75,000	11 months	Basic understanding of statistics and programming	<u>UpGrad ML and AI</u>
Simplilearn's AI and ML Certification	₹14,999	6 months	Basic programming skills	<u>Simplilearn AI and ML</u>
Edureka's AI and ML Certification Training	₹17,995	3 months	Basic understanding of Python	<u>Edureka AI and ML</u>
Udacity's Intro to Machine Learning with PyTorch	₹28,000	3 months	Basic Python knowledge	<u>Udacity ML with PyTorch</u>
Analytics Vidhya's Data Science and Machine Learning Bootcamp	₹9,999	2 months	Basic programming and math skills	<u>Analytics Vidhya Bootcamp</u>

SOURCES: Employment News and Relevant Websites



HOW TO VISIT NICS, NOIDA



TO CONTACT

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Google Map Link: <https://goo.gl/maps/sdiP3JLa4Ew>

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