National Institute of Electronics and Information Technology, Delhi Centre

राष्ट्रीयइ लेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी संस्थान, दिल्ली केंद्र

Autonomous Scientific Society ofMinistry of Electronics & Information Technology (MeitY), Govt. of India,

East Delhi Centre, Karkardooma

Institutional Area, X-30, FC-18, near Kendriya Vidyalaya, Karkardooma, Delhi, 110092

Course Prospectus

Artificial Intelligence Development Associate

NSQF Level-4

MODE : ONLINE/BLENDED

Admission Link - https://onlineapply.nielit.in/

Last Date of Application: 18-05-2026

Tentative Start Date and Time : 19-05-2026,
2.00 PM to 5.00 PM

Index

Objective of the Course:

Welcome to the AI Development Associate Program! This course is designed to be your gateway into the fascinating world of Artificial Intelligence (AI). Whether you're a beginner or someone looking to strengthen your foundation, this program will empower you with the essential knowledge and skills to thrive in AI development.

Our core objectives include:

- **Understanding the Fundamentals:** Dive deep into key AI concepts such as Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP), and Computer Vision. Learn not just the theory but also how these technologies are shaping the future.
- **Hands-On Learning Experience:** Get your hands dirty with popular AI tools, libraries, and frameworks like TensorFlow, PyTorch, scikit-learn, and more. Build real AI models, experiment with datasets, and watch your code come alive.
- **Problem-Solving with AI:** Discover how to approach real-world challenges using data-driven strategies. From predicting trends to automating tasks, you will learn to create solutions that make a difference.
- **Project-Based Approach:** Engage in practical projects and assignments that mimic industry scenarios. By the end of the program, you'll have a portfolio of AI applications to showcase your skills.
- **Career Preparation:** Equip yourself for entry-level roles in AI development. Understand the job market, prepare for interviews, and explore pathways for advanced specialization in AI and data science.
- **Ethical AI and Responsible Use:** Explore the ethical considerations surrounding AI technologies. Learn about fairness, transparency, and accountability to build AI systems that are trustworthy and responsible.
- **Continuous Learning and Growth:** The AI field evolves rapidly. This program encourages a mindset of continuous learning, curiosity, and adaptation to stay ahead in this dynamic industry.

Outcome of the Course: What You Will Be Able to Achieve

Upon successful completion of this program, you will emerge confident, skilled, and ready to make an impact in the field of Artificial Intelligence. Here's what you can expect to accomplish:

- **Build and Deploy Real-World AI Solutions:** Develop AI models that are not only theoretically sound but also practical and deployable. You will learn how to design solutions that effectively address complex challenges across various industries—from healthcare to finance and beyond.
- **Master Industry-Relevant Tools and Technologies:** Gain hands-on expertise in essential tools such as Python for programming, Orange for data mining, Tableau for visualization, and advanced AI libraries like TensorFlow and PyTorch. This technical proficiency will prepare you to meet industry standards confidently.
- **Extract Insights from Diverse Data:** Learn to work with both structured and unstructured data sources. You'll become skilled at processing raw data, evaluating its quality, and extracting meaningful insights that drive informed decision-making.
- **Design Ethical and Responsible AI Systems:** Understand the importance of fairness, transparency, and bias mitigation in AI. You will be equipped to create AI solutions that respect societal values and promote trust, ensuring your systems are ethically sound and socially responsible.
- **Adopt an Entrepreneurial and Innovative Mindset:** Foster creativity and innovation by identifying emerging industrial challenges where AI can make a difference. Develop a problem-solving approach with an entrepreneurial spirit, empowering you to build AI-driven solutions that open new business opportunities.
- **Collaborate and Communicate Effectively:** Strengthen your ability to work within multidisciplinary teams, communicate AI concepts clearly, and translate technical results into actionable business strategies.
- **Prepare for Future Growth:** Build a strong foundation that will support your ongoing learning and specialization in AI, data science, or related fields, keeping you adaptable in this fast-evolving technology landscape.

Course Structure

Module	Module Name	Th.	Pr.	Total
1.	Implementation of Basic AI Solution using Python programming language and SMART Framework.	15	15	30
2.	Solving use cases using AI models along with building up Entrepreneurial Mindset	25	35	60
3.	Realization of Projects in AI domains with an understanding of AI Project Pitfalls	70	80	150
4.	Solving Real-time industrial problem statements using AI	10	20	30
5.	Employability Skills	-	-	60
6.	Implementation of AI project in virtual environment/ OJT	-	-	240
	Duration (in Hours)	120	150	570

Eligibility

Minimum Educational Qualification and Experience	Pursuing the 1st year of UG in any discipline OR 12th Grade Pass OR Completed 2nd year of the 3-year diploma in CS/IT/EC/EE/ allied after 10th OR 12th Grade Pass who have undergone the ARTIFICIAL INTELLIGENCE course as a Vocational subject in class 12th OR Previous relevant Qualification of NSQF Level 3.0 with a minimum education of 10th Grade pass with 3 years of relevant experience.

Course Fees Structure

Fees Details	General Category	SC/ST Category
Admission Fee, Registration Fee, Exam Fee, Practical Fee, Project Fee	₹2,750	₹2,750
Course Fee	₹23,940	NIL
Total Fee	**₹26,690**	**₹2,750**
Ist Installment	**₹14,690**	**₹ 2,750**
2nd Installment	**₹ 12,000**	**NIL**

Fee- Refund Policy:

(Non-Refundable if candidate is selected for admission but did not join and if a candidate has applied but not eligible.)

However, the registration fee shall be refunded on few special cases as given below:

1) Candidates are eligible but not selected for admission.

2) Course cancelled.

Seat Capacity: 100

Classes shall be conducted in blended mode (online classes) + offline (practical classes). Students can visit the centre for doubt session, Practical work, Project work etc. and access IndiaAI data Lab one day per week.

HOW TO APPLY?

Candidates can apply online through given link – **https://onlineapply.nielit.in/** and pay the requisite fees.

Note: *The Institute will not be responsible for any mistakes done by Individual.*

Selection Criteria

Selection of candidates will be based on their marks in the qualifying examination subject to eligibility and availability of seats.

- ✓ Selection will be made based on First-cum-First served basis.
- ✓ Document verification shall be carried out at NIELIT Karkardooma centre. Following documents of candidates will be verified:
    - Qualifying Degree (Consolidated Marksheet/Degree Certificate/Course Completion Certificate), 10th and 12th mark sheet.
    - One passport size photograph.
    - Self-attested copy of Govt. issued photo ID card.
    - AADHAR Copy
- ✓ Registration/final admission will be confirmed only after the candidate is found eligible and suitable upon document verification

All the selected candidates belonging to SC/ST category has to compulsorily visit NIELIT, Karkardooma centre for Biometric Authentication (one time) at the time of registration.

Examination & Certification

Final Certificates will be issued after successful completion of all the modules including practical and project. For getting certificate a candidate has to pass each module individually with minimum required marks of 50%.

NSQF Examination Pattern

SNo	Examination Pattern	Modules Covered	Duration in Minutes	Maximum Marks
1	Theory Paper-1 DATA SCIENCE &VISUALIZATION WITH PYTHON	Module 1,2,4	90	100
2	Theory Paper-2 BUILDING MACHINE LEARNING MODEL	Module 3	90	100
3	Practical 1	Module 1,2,3,4	90	90
4	Internal Assessment		-	30
5	Project		-	30
Total				350

Proctor based examination shall be conducted for which all the students needs to be physically appear for examination at NIELIT Delhi , Karkardooma centre.

Grading Scheme

Following Grading scheme (on the basis of total marks) will be followed:

Grade	S	A	B	C	D
Marks Range (in %)	**>=85%**	**>=75% and 85%**	**>=65% and <75%**	**>=55% and <65%**	**>=50% and <55%**

Detailed Curriculum

Module 1: Implementation of Basic AI Solution using Python programming language and SMART Framework
1. SMART component and tell what each acronym means 2. AI project cycle 3. Orange Data Mining Tool 4. An introduction to Python programming language 5. Tableau Public
Module 2: Solving use cases using AI models along with building up Entrepreneurial Mindset
1. Introduction to Python libraries 2. AI models to solve various industry applications using Python. 3. Design Thinking and AI bias 4. Entrepreneurial Mindset
Module 3: Realization of Projects in AI domains with understanding of AI Project Pitfalls
1. Supervised, unsupervised, and reinforcement learning 2. Computer Vision, Statistical Data, Natural Language Processing and current applications of the Technology 3. 5 pillars of Social Emotional Skills and AI ethics 4. Project Pitfalls in relation to the AI project cycle 5. Intel's oneAPI library.
Module 4: Solving of Real time industrial problem statements using AI
1. Qualify data from multiple sources 2. Evaluate data for attributes 3. Bias and variance 4. Define and qualify AI models

Contact Us:

Course Coordinator: Dr Shivlok Singh , Principal Technical Officer,
NIELIT Delhi Centre, East Delhi Office
30-X, FC-18, Institutional Area, Karkardooma,
New Delhi-110092 m- 011-20824140, 7042864055

Website: www.nielit.gov.in/Delhi/index.php

Admission Link - **https://onlineapply.nielit.in/**

facebook: NDL.NIELIT

X: NDL_NIELIT

Insta: NIELIT_DELHI_OFFICIAL

Email: eastdelhi@nielit.gov.in