AI+ Engineer

Category: AI, Data & Analytics | **Vendor:** AI Certs

Duration: 40.00 hours (5 days) **32.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	AI+ Engineer
Related Exam:	AI+ Engineer

Course Overview

The AI+ Engineer course is meticulously crafted to introduce learners to the foundational and intricate elements of Artificial Intelligence (AI). Aimed at those keen on mastering both the theoretical underpinnings and practical applications of AI, the curriculum starts with the basics and progressively covers advanced topics such as AI Architecture, Neural Networks, Large Language Models, Generative AI, Natural Language Processing, and Transfer Learning. Special attention is given to the application of Hugging Face tools, ensuring that participants gain a comprehensive understanding of how AI works and its diverse applications. Designed with a focus on hands-on learning, this course prepares individuals to develop sophisticated Graphical User Interfaces (GUIs) for AI systems and to delve into the nuances of AI communication and deployment. Through engaging in practical projects and tackling real-world challenges, students will emerge with the ability to design and implement effective AI solutions. By the end of the course, they will possess a deep knowledge of AI concepts and methodologies, equipping them to address real-world issues and drive forward the progress of Artificial Intelligence.

About This Course

The AI+ Engineer course is meticulously crafted to introduce learners to the foundational and intricate elements of Artificial Intelligence (AI). Aimed at those keen on mastering both the theoretical underpinnings and practical applications of AI, the curriculum starts with the basics and progressively covers advanced topics such as AI Architecture, Neural Networks, Large Language Models, Generative AI, Natural Language Processing, and Transfer Learning. Special attention is given to the application of Hugging Face tools, ensuring that participants gain a comprehensive understanding of how AI works and its diverse applications. Designed with a focus on hands-on learning, this course prepares individuals to develop sophisticated Graphical User Interfaces (GUIs) for AI systems and to delve into the nuances of AI communication and deployment. Through engaging in practical projects and tackling real-world challenges, students will emerge with the ability to design and implement effective AI solutions. By the end of the course, they will possess a deep knowledge of AI concepts and methodologies, equipping them to address real-world issues and drive forward the progress of Artificial Intelligence.

Who Should Attend

AI Engineer

Prerequisites & Entry Requirements

General Prerequisites:

AI+ Data or AI Developer course should be completed., Proficiency in Python is mandatory for hands-on exercises and project work., Familiarity with high school-level algebra and basic statistics., Understanding basic programming concepts (variables, functions, loops) and data structures (lists, dictionaries).

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Course Objectives

- Foundational Understanding
- Ethical Considerations
- Understanding AI Architecture and Development Lifecycle
- Practical Implementation and Hands-on Experience
- Effective Communication and Deployment

Detailed Course Outline

- Foundations of Artificial Intelligence

  Introduction to AI Core Concepts and Techniques in AI Ethical Considerations

- Introduction to AI Architecture

  Overview of AI and its Various Applications Introduction to AI Architecture Understanding the AI Development Lifecycle Hands-on: Setting up a Basic AI Environment

- Fundamentals of Neural Networks

  Basics of Neural Networks Activation Functions and Their Role Backpropagation and Optimization Algorithms Hands-on: Building a Simple Neural Network Using a Deep Learning Framework

- Applications of Neural Networks

  Introduction to Neural Networks in Image Processing Neural Networks for Sequential Data Practical Implementation of Neural Networks

- Significance of Large Language Models (LLM)

  Exploring Large Language Models Popular Large Language Models Practical Finetuning of Language Models Hands-on: Practical Finetuning for Text Classification

- Application of Generative AI

Introduction to Generative Adversarial Networks (GANs) Applications of Variational Autoencoders (VAEs) Generating Realistic Data Using Generative Models Hands-on: Implementing Generative Models for Image Synthesis

- Natural Language Processing

NLP in Real-world Scenarios Attention Mechanisms and Practical Use of Transformers In-depth Understanding of BERT for Practical NLP Tasks Hands-on: Building Practical NLP Pipelines with Pretrained Models

- Transfer Learning with Hugging Face

Overview of Transfer Learning in AI Transfer Learning Strategies and Techniques Hands-on: Implementing Transfer Learning with Hugging Face Models for Various Tasks

- Crafting Sophisticated GUIs for AI Solutions

Overview of GUI-based AI Applications Web-based Framework Desktop Application Framework

- AI Communication and Deployment Pipeline

Communicating AI Results Effectively to Non-Technical Stakeholders Building a Deployment Pipeline for AI Models Developing Prototypes Based on Client Requirements Hands-on: Deployment

- Foundations of Artificial Intelligence

Introduction to AI Core Concepts and Techniques in AI Ethical Considerations

- Introduction to AI Architecture

Overview of AI and its Various Applications Introduction to AI Architecture Understanding the AI Development Lifecycle Hands-on: Setting up a Basic AI Environment

- Fundamentals of Neural Networks

Basics of Neural Networks Activation Functions and Their Role Backpropagation and Optimization Algorithms Hands-on: Building a Simple Neural Network Using a Deep Learning Framework

- Applications of Neural Networks

Introduction to Neural Networks in Image Processing Neural Networks for Sequential Data Practical Implementation of Neural Networks

- Significance of Large Language Models (LLM)

Exploring Large Language Models Popular Large Language Models Practical Finetuning of Language Models Hands-on: Practical Finetuning for Text Classification

- Application of Generative AI

  Introduction to Generative Adversarial Networks (GANs) Applications of Variational Autoencoders (VAEs) Generating Realistic Data Using Generative Models Hands-on: Implementing Generative Models for Image Synthesis

- Natural Language Processing

  NLP in Real-world Scenarios Attention Mechanisms and Practical Use of Transformers In-depth Understanding of BERT for Practical NLP Tasks Hands-on: Building Practical NLP Pipelines with Pretrained Models

- Transfer Learning with Hugging Face

  Overview of Transfer Learning in AI Transfer Learning Strategies and Techniques Hands-on: Implementing Transfer Learning with Hugging Face Models for Various Tasks

- Crafting Sophisticated GUIs for AI Solutions

  Overview of GUI-based AI Applications Web-based Framework Desktop Application Framework

- AI Communication and Deployment Pipeline

  Communicating AI Results Effectively to Non-Technical Stakeholders Building a Deployment Pipeline for AI Models Developing Prototypes Based on Client Requirements Hands-on: Deployment

, Foundations of Artificial Intelligence, Introduction to AI Architecture, Fundamentals of Neural Networks, Applications of Neural Networks, Significance of Large Language Models (LLM), Application of Generative AI, Natural Language Processing, Transfer Learning with Hugging Face, Crafting Sophisticated GUIs for AI Solutions, AI Communication and Deployment Pipeline, Optional Module: AI Agents for Engineering

□□ Certification Path

AI+ Engineer

Exam: AI+ Engineer

Additional Course Details

Nexus Humans AI+ Engineer training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward. This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the AI+ Engineer course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for AI+ Engineer?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The AI+ Engineer course helps prepare you for the AI+ Engineer certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AI+ Engineer official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 5-day AI+ Engineer course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AI+ Engineer training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AI+ Engineer?

Yes, we provide corporate training, dedicated training, and closed classes for AI+ Engineer. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: AI+ Engineer, AI Certs, vILT

Q: Why choose Nexus Human for AI+ Engineer?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your AI+ Engineer training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

© 2026 Nexus Human. All rights reserved. This brochure was generated on 14/11/2026.