Microsoft Azure

Always Available, Effortlessly Accessible,
and Endlessly Reliable

AI – 102

Designing and Implementing a Microsoft Azure AI

Overview

AI-102 Designing and Implementing an Azure AI Solution is intended for software developers wanting to build AI infused applications that leverage Azure AI Services, Azure AI Search, and Azure OpenAI. The course will use C# or Python as the programming language.

Course Objectives

By the end of this course, participants will be able to:

- Plan and manage an Azure AI solution
- Implement decision support solutions
- Implement computer vision solutions
- Implement natural language processing solutions
- Implement knowledge mining and document intelligence solutions
- Implement generative AI solutions

Prerequisites

Candidates for this certification are expected to have a solid understanding of Azure services, machine learning concepts, and programming skills. It's recommended that individuals have hands-on experience with Azure AI services and are proficient in one or more programming languages, such as Python or C#. Overall, the AI-102 certification is suitable for those looking to demonstrate their expertise in implementing AI solutions in a Microsoft Azure environment.

Audience Profile

Software engineers concerned with building, managing and deploying AI solutions that leverage Azure AI Services, Azure AI Search, and Azure OpenAI. They are familiar with C# or Python and have knowledge on using REST-based APIs to build computer vision, language analysis, knowledge mining, intelligent search, and generative AI solutions on Azure.
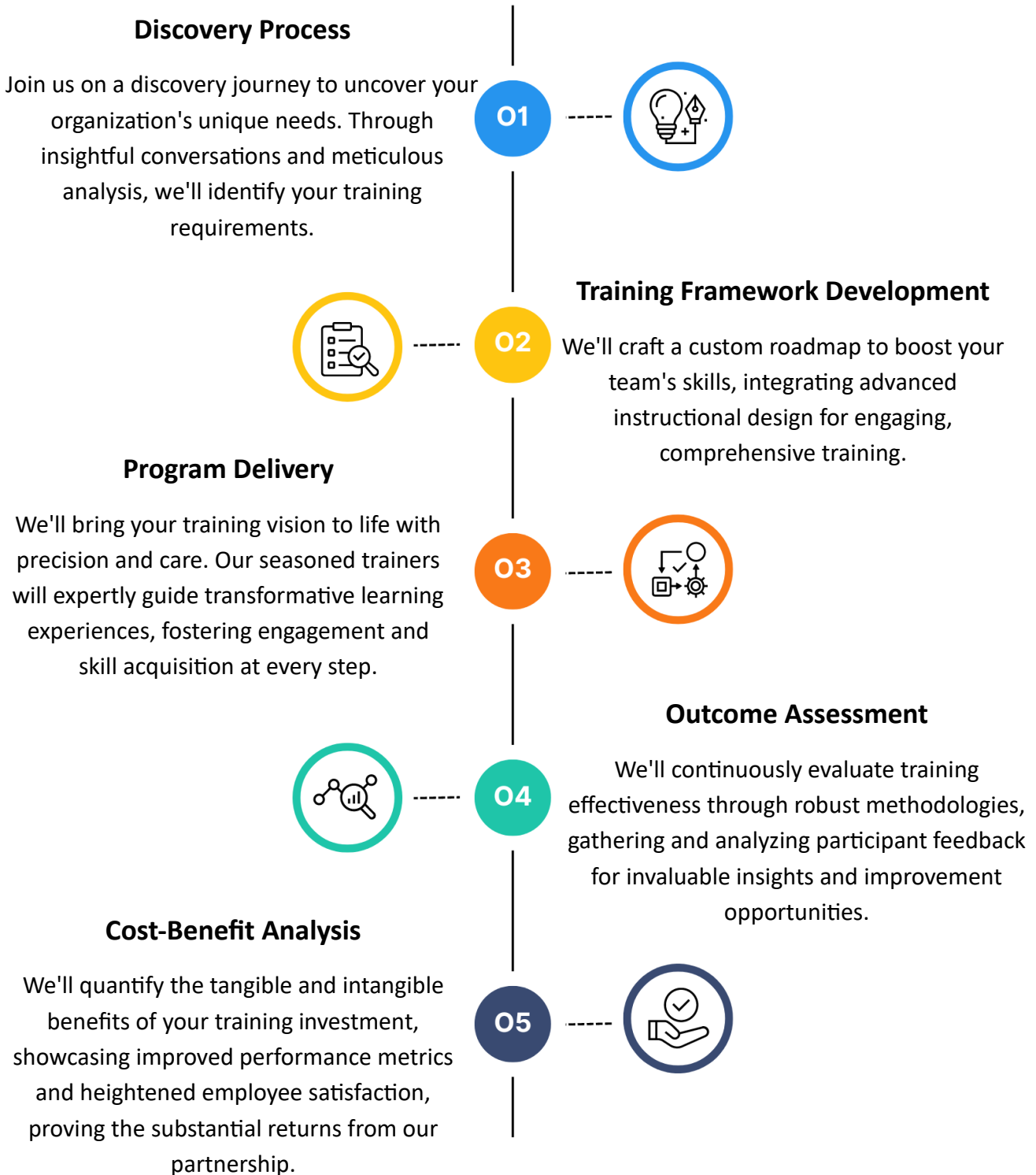
Course Level

- Intermediate

Course Duration

- 4 Days – 32 Hours

Creating Tailor - Made Training Programs to Meet Your Specific Goals

Discovery Process

Join us on a discovery journey to uncover your organization's unique needs. Through insightful conversations and meticulous analysis, we'll identify your training requirements.

O1

Training Framework Development

O2

We'll craft a custom roadmap to boost your team's skills, integrating advanced instructional design for engaging, comprehensive training.

Program Delivery

We'll bring your training vision to life with precision and care. Our seasoned trainers will expertly guide transformative learning experiences, fostering engagement and skill acquisition at every step.

O3

Outcome Assessment

O4

We'll continuously evaluate training effectiveness through robust methodologies, gathering and analyzing participant feedback for invaluable insights and improvement opportunities.

Cost-Benefit Analysis

We'll quantify the tangible and intangible benefits of your training investment, showcasing improved performance metrics and heightened employee satisfaction, proving the substantial returns from our partnership.

O5

Course Outline

As a Microsoft Azure AI engineer, you build, manage, and deploy AI solutions that leverage Azure AI.

Your responsibilities include participating in all phases of AI solutions development, including:

- Requirements definition and design
- Development
- Deployment
- Integration
- Maintenance
- Performance tuning
- Monitoring

You work with solution architects to translate their vision. You also work with data scientists, data engineers, Internet of Things (IoT) specialists, infrastructure administrators, and other software developers to:

- Build complete and secure end-to-end AI solutions.
- Integrate AI capabilities in other applications and solutions.

As an Azure AI engineer, you have experience developing solutions that use languages such as:

- Python
- C#

You should be able to use Representational State Transfer (REST) APIs and SDKs to build secure image processing, video processing, natural language processing, knowledge mining, and generative AI solutions on Azure. You should:

- Understand the components that make up the Azure AI portfolio and the available data storage options.
- Be able to apply responsible AI principles.

Module 1: Introduction to AI and AI on Azure
- Lesson: Introduction to AI
- Lesson: AI on Azure
- Lesson: Get started with Azure AI services
- Lesson: Using Azure AI Services for enterprise applications
- **Exercise –** Get Started with Azure AI Services
- **Extended interactive exercises –** Use an Azure AI Services container

Module 2: Develop computer vision solutions with Azure AI Vision
- Lesson: Analyze and manipulate images
- Lesson: Create a custom vision model
- Lesson: Detect and recognize faces
- Lesson: Analyze video
- **Lab –** Analyze Images with Azure AI Vision
- **Lab –** Read Text in Images
- **Lab –** Classify Images with Azure AI Vision custom model

Module 3: Develop natural language processing solutions
- Lesson: Analyzing and translating text
- Lesson: Build a question answering solution
- Lesson: Build a conversational language understanding app
- Lesson: Custom classification and named entity extraction
- Lesson: Speech recognition, synthesis, and translation
- **Exercise –** Analyze Text
- **Exercise –** Create a Question Answering solution
- **Exercise –** Create a conversational language understanding app
- **Exercise –** Recognize and Synthesize Speech
- Extended interactive exercises

Module 4: Develop Generative AI Solutions with Azure OpenAI Service
- Lesson: Get started with Azure OpenAI Service
- Lesson: Develop apps with Azure OpenAI Service
- Lesson: Apply prompt engineering with Azure OpenAI Service
- Lesson: Use your own data with Azure OpenAI Service
- **Exercise:** Integrate Azure OpenAI into your app
- **Exercise:** Utilize prompt engineering in your app
- **Exercise:** Use your own data with Azure OpenAI Service
- Extended interactive exercises

Module 5: Creating a Knowledge Mining Solution
- Lesson: Implementing an Intelligent Search Solution
- Lesson: Developing Custom Skills for an Enrichment Pipeline
- Lesson: Creating a Knowledge Store
- **Exercise –** Create a Custom Skill for Azure AI Search
- **Extended interactive exercises –** Create a Knowledge Store with Azure AI Search

Module 6:Develop solutions with Azure AI Document Intelligence
- Lesson: Use prebuilt Document Intelligence models
- Lesson: Train a custom Document Intelligence model
- **Lab –** Extract Data from Forms

Indus Tech Services

Who We Are....

Indus Tech Services is an IT company that specializes in providing comprehensive training, consulting & implementation services for software solutions designed to address the diverse business challenges faced by organizations today. With a passion for technology and a deep understanding of business processes, Indus Tech is committed to empowering businesses to optimize their operations, boost productivity, and drive sustainable growth.

Indus Tech Services and Microsoft Partnership

As a proud **Microsoft Partner**, **Indus Tech Services** is uniquely equipped to deliver top-tier training and certification programs designed to meet the evolving needs of today's workforce. Our partnership with Microsoft allows us to offer direct access to the latest tools, resources, and industry insights, ensuring that our courses are aligned with the most current technology trends. This collaboration enables us to provide unparalleled support to our students, helping them gain the skills and knowledge required to excel in their careers. By choosing Indus Tech Services, you're not just learning; you're gaining a competitive edge with Microsoft-backed expertise and certification.

Why Choose Us...

From time to time, life serves up a profound nudge, urging us to step beyond our routines and make a difference in the world. Indus Tech Services emerged from one such compelling wake-up call. We are not just a company; we are a dedicated force with a belief in providing solutions to organizations, regardless of their size, and we infuse a human touch into everything we do.

Our Expertise

With over 25 years of collective experience navigating the intricacies of daily business transactions, irrespective of geographical, cultural, time zone, or language barriers, our team has honed their expertise to meet any challenge head-on. This wealth of experience has armed our resources with an unparalleled understanding and skill set to tackle a broad spectrum of obstacles.

Training

With two decades of unwavering commitment and a global footprint, our company is a true pioneer in the fields of linguistic, transactional, technical, and behavioural training for some of the world's largest corporate entities. Our unparalleled expertise has been refined through years of dedication and innovation, making us the go-to choice for businesses seeking transformative training solutions.

Consulting

Our company has been at the forefront of providing world-class IT consulting services to organizations spanning the globe. With an extensive and proven track record, we have honed our expertise to meet the ever-evolving technological needs and challenges faced by businesses, regardless of their scale or industry.

Implementation

Our experience covers a broad spectrum of IT implementation services, including system integration, software deployment, network architecture, cloud migration, and infrastructure setup. We understand that the successful execution of IT projects is pivotal to an organization's growth and efficiency. Therefore, we bring a depth of knowledge and a commitment to delivering results that set us apart.

To know more contact us at info@industechservices.com or call us at +91 - 99961 61170.