



MICROSOFT TRAINING

AI-3003: Develop Natural Language Solutions in Azure

Develop advanced natural language solutions on Azure. Master AI-3003 skills for building conversational AI and more.

DURATION

32 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

Computer Pride | 1st Floor, ICEA Building, Kenyatta Avenue, Nairobi | www.computer-pride.co.ke

COURSE OVERVIEW

The AI-3003: Develop Natural Language Solutions in Azure course provides a comprehensive and engaging learning experience for IT professionals seeking to master the art of building intelligent applications that interact with human language. This intermediate-level course, spanning 32 hours, dives deep into Microsoft's Azure Cognitive Services, specifically focusing on its robust Natural Language Processing (NLP) capabilities. Participants will gain practical expertise in core technologies such as the Azure Language Service, Azure Speech Service, Azure Translator, Language Understanding (LUIS), and QnA Maker, learning how to leverage these powerful tools to create sophisticated AI-driven solutions.

This course is meticulously designed to equip you with the skills to develop, deploy, and manage advanced NLP applications on the Azure platform. You will learn to extract meaningful insights from unstructured text, enable seamless cross-language communication, power intelligent virtual assistants, and build knowledge-mining solutions. The professional benefits are substantial: by mastering AI-3003, you will be able to enhance customer experiences through intuitive conversational interfaces, automate information extraction processes, and drive data-driven decision-making within your organization. This expertise is highly sought after in today's digital economy, making you an invaluable asset in any forward-thinking enterprise.

By the end of this certification course, you will possess a strong foundation in designing and implementing scalable, secure, and highly effective natural language solutions within the Azure ecosystem. This empowers you to innovate across various domains, from automating customer support with chatbots to analyzing market sentiment from vast datasets, positioning you at the forefront of AI development.

Duration	32 hours
Level	Intermediate
Vendor	Microsoft
Exam Code	AI-3003

COURSE CURRICULUM

01 Module 1: Foundations of Azure AI and Natural Language Processing

- Overview of Azure AI services for NLP
- Introduction to text analytics and language understanding concepts
- Setting up Azure resources for Cognitive Services
- Understanding ethical considerations in AI and NLP

02 Module 2: Implementing Azure Language Service for Text Understanding

- Detecting language, sentiment, and key phrases
- Extracting entities (NER) and linked entities
- Building custom text classification models
- Creating custom named entity recognition (NER) models
- Integrating Language Service into applications

03 Module 3: Developing Speech and Translation Solutions

- Speech-to-text transcription and customization
- Text-to-speech synthesis and voice customization

- Real-time and batch translation with Azure Translator
- Implementing speech and translation in multi-language applications

04 Module 4: Building Conversational AI with LUIS and Bot Framework

- Designing effective conversational user interfaces
- Understanding intents and entities with Language Understanding (LUIS)
- Developing LUIS models and improving performance
- Integrating LUIS with Azure Bot Service
- Deploying and managing conversational bots

05 Module 5: Knowledge Mining and QnA Solutions

- Creating and managing knowledge bases with QnA Maker
- Populating QnA Maker with data sources
- Enhancing QnA Maker with active learning and multi-turn interactions
- Building search-driven applications with Azure Cognitive Search
- Integrating QnA Maker with bots and applications

06 Module 6: Deploying, Monitoring, and Securing NLP Solutions

- Strategies for deploying Azure Cognitive Services
- Monitoring and troubleshooting NLP solutions with Azure Monitor
- Securing Azure AI services and data
- Cost management for Azure AI resources
- Implementing MLOps practices for NLP models

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Azure AI Engineer (Specializing in NLP)**
- > **Conversational AI Developer**
- > **Cognitive Services Solutions Architect**

FREQUENTLY ASKED QUESTIONS

Q: What are the recommended technical prerequisites for taking the AI-3003 course and successfully building Azure NLP solutions?

This intermediate-level course assumes a foundational understanding of Azure services, including experience with the Azure portal and basic resource deployment. Proficiency in a programming language, preferably Python, is highly beneficial as many labs and examples utilize Python SDKs for interacting with Azure Cognitive Services. Basic knowledge of AI/ML concepts can also aid comprehension but is not strictly required as NLP fundamentals are covered.

Q: How does AI-3003 specifically prepare me for building real-world natural language processing applications on Azure?

AI-3003 is intensely practical, focusing on hands-on development using Microsoft's powerful Azure Cognitive Services. You will gain direct experience in tasks such as developing custom text classification and entity recognition models, implementing real-time speech-to-text and text-to-speech, building intelligent conversational agents using LUIS and Bot Framework, and creating comprehensive knowledge bases with QnA Maker. The course emphasizes architectural

patterns and best practices for deploying and managing these solutions in a production environment, directly translating to skills required for enterprise-level NLP projects.

Q: What distinct advantages does developing NLP solutions on Azure provide, as taught in this AI-3003 course, compared to using open-source libraries or other cloud platforms?

This course highlights Azure's distinct advantages for NLP development, including its comprehensive suite of pre-trained Cognitive Services that offer enterprise-grade accuracy and scalability out-of-the-box, significantly reducing development time. You'll learn to leverage Azure's integrated ecosystem for seamless deployment, monitoring, and security. The course emphasizes how Azure streamlines data handling, model training with minimal code (often through its managed services), and provides robust tools for MLOps, allowing developers to focus more on solution logic rather than infrastructure management, a key differentiator from purely open-source or less integrated cloud offerings.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

Location

1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email

info@computer-pride.co.ke

Phone

+254 705 900 900

www.computer-pride.co.ke