



Train. Employ. Empower.

# AI-3003 Build a natural language processing solution with Azure AI Services

Price  
\$495.00

Duration  
1 Daytime Class  
or  
2 Evening Classes

Delivery Methods  
Virtual, Private  
Group,

## CAREER SKILLS+™

This specialized course, tailored for the DSDT's Career Skills+ program, focuses on the practical application of natural language processing (NLP) through Azure AI Services. Participants will learn how to harness the power of language models to decipher the semantic meanings of text and speech, integrating these skills with essential digital technology competencies. This training not only covers theoretical knowledge but also emphasizes hands-on practice in building and deploying language models that meet the needs of local industries.

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### Who Should Attend

This course is designed for professionals who are familiar with Azure, have experience in programming with C# or Python, and are looking to deepen their expertise in natural language processing within cloud environments. Ideal participants include software developers, data scientists, and IT professionals eager to implement NLP solutions in their projects or workflows.

### Course Prerequisites

Basic knowledge of the Azure platform and its functionalities.  
Programming experience with C# or Python.

## Course Objectives

Understand and implement NLP solutions using Azure AI Language services.

Develop skills in provisioning Azure AI resources and utilizing various service capabilities like text analysis, sentiment analysis, entity extraction, and language translation.

Construct robust conversational models and custom NLP applications tailored to specific business requirements.

Enhance problem-solving skills with practical, real-world applications, and improve performance of NLP models. This course is designed for professionals who are familiar with Azure, have experience in programming with C# or Python, and are looking to deepen their expertise in natural language processing within cloud environments. Ideal participants include software developers, data scientists, and IT professionals eager to implement NLP solutions in their projects or workflows.

## Agenda

### Introduction to Azure AI Language Services

Analyzing text

Detecting language and extracting key phrases

Sentiment analysis and entity extraction

### Building and Enhancing Language Understanding Models

Constructing question answering systems

Comparing different models and understanding prebuilt capabilities

Creating and managing a knowledge base

Implementing multi-turn conversation features

Training and refining conversational language models

### Advanced Applications with Azure AI

Developing custom text classification and named entity extraction solutions

Labeling data and training models for specific use cases

Translating text and speech with Azure AI Translator and Speech Services

Configuring audio options and using Speech Synthesis Markup Language for enhanced interaction

### Practical Implementation and Performance Optimization

Applying practical examples to real-world scenarios

Testing, publishing, and reviewing applications

Strategies for improving the efficiency and accuracy of NLP models

This curriculum blends DSDT's commitment to digital proficiency and local economic integration, ensuring that every participant

leaves with actionable skills and a deeper understanding of how to apply NLP technology in a variety of professional settings.