

# Develop Natural Language Solutions in Azure (AI-3003)

## COURSE OVERVIEW

Natural language solutions use language models to interpret the semantic meaning of written or spoken language, and in some cases respond based on that meaning. You can use the Language service to build language models for your applications, and explore Azure AI Foundry to use generative models for speech.

## WHO WILL BENEFIT FROM THIS COURSE?

- Database Professional
- Microsoft Professional

## PREREQUISITES

Before starting this learning path, you should already have:

- Familiarity with Azure and the Azure portal.
- Experience programming with C# or Python. If you have no previous programming experience, we recommend you complete the Take your first steps with C# or Take your first steps with Python learning path before starting this one.

## COURSE OBJECTIVES

In this course you'll learn:

- Analyze text with Azure AI Language
- Create question answering solutions with Azure AI language
- Build a conversational language understanding model
- Create a custom text classification solution
- Custom named entity recognition
- Translate text with Azure AI Translator service
- Create speech-enabled apps with Azure AI services
- Translate speech with the Azure AI Speech service
- Develop an audio-enabled Generative AI application

## COURSE OUTLINE

Analyze text with Azure AI Language

- Provision an Azure AI Language resource
- Detect language
- Extract key phrases
- Analyze sentiment
- Extract entities
- Extract linked entities
- Exercise - Analyze text



#### Create question answering solutions with Azure AI language

- Understand question answering
- Compare question answering to Azure AI Language understanding
- Create a knowledge base
- Implement multi-turn conversation
- Test and publish a knowledge base
- Use a knowledge base
- Improve question answering performance
- Exercise - Create a question answering solution

#### Build a conversational language understanding model

- Understand prebuilt capabilities of the Azure AI Language service
- Understand resources for building a conversational language understanding model
- Define intents, utterances, and entities
- Use patterns to differentiate similar utterances
- Use pre-built entity components
- Train, test, publish, and review a conversational language understanding model
- Exercise - Build an Azure AI services conversational language understanding model

#### Create a custom text classification solution

- Understand types of classification projects
- Understand how to build text classification projects
- Exercise - Classify text

#### Custom named entity recognition

- Understand custom named entity recognition
- Label your data
- Train and evaluate your model
- Exercise - Extract custom entities

#### Translate text with Azure AI Translator service

- Provision an Azure AI Translator resource
- Understand language detection, translation, and transliteration
- Specify translation options
- Define custom translations
- Exercise - Translate text with the Azure AI Translator service

#### Create speech-enabled apps with Azure AI services

- Provision an Azure resource for speech
- Use the Azure AI Speech to Text API
- Use the text to speech API
- Configure audio format and voices
- Use Speech Synthesis Markup Language
- Exercise - Create a speech-enabled app

#### Translate speech with the Azure AI Speech service

- Provision an Azure resource for speech translation

- Translate speech to text
- Synthesize translations
- Exercise - Translate speech

Develop an audio-enabled Generative AI application

- Deploy a multimodal model
- Develop an audio-based chat app
- Exercise - Develop an audio-enabled chat app

---

## **WHY TRAIN WITH SUNSET LEARNING INSTITUTE?**

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their technology investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

### **Premiere World Class Instruction Team**

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

### **Enhanced Learning Experience**

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

### **Convenient and Reliable Training Experience**

- You have the option to attend classes live with the instructor, at any of our established training facilities, or from the convenience of your home or office
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

### **Outstanding Customer Service**

- You will work with a dedicated account manager to suggest the optimal learning path for you and/or your team
- An enthusiastic student services team is available to answer any questions and ensure a quality training experience.

**Interested in Private Group Training?**

[Contact Us](#)