

# AI 3022- Implement Knowledge Mining With Azure AI Search

Days: 1



**Prerequisites:** Before starting this module, you should have familiarity with Microsoft Azure Application development experience with C# or Python.

**Description:** Do you have information locked up in structured and unstructured data sources? Using Azure AI Search, you can extract key insights from this data, and enable applications to search and analyze them.

## OUTLINE

### LESSON 1 - CREATE AN AZURE AI SEARCH SOLUTION

- Manage capacity
- Understand search components
- Understand the indexing process
- Search an index
- Apply filtering and sorting
- Enhance the index

### LESSON 2 - CREATE A CUSTOM SKILL FOR AZURE AI SEARCH

- Define the custom skill schema
- Add a custom skill
- Custom text classification skill
- Machine learning custom skill

### LESSON 3 - CREATE A KNOWLEDGE STORE WITH AZURE AI SEARCH

- Define projections
- Define a knowledge store

### LESSON 4 - IMPLEMENT ADVANCED SEARCH FEATURES IN AZURE AI SEARCH

- Improve the ranking of a document with term boosting
- Improve the relevance of results by adding scoring profiles
- Improve an index with analyzers and tokenized terms
- Enhance an index to include multiple languages
- Improve search experience by ordering results by distance from a given reference point

### LESSON 5 - SEARCH DATA OUTSIDE THE AZURE PLATFORM IN AZURE AI SEARCH USING AZURE DATA FACTORY

- Index data from external data sources using Azure Data Factory
- Index any data using the Azure AI Search push API

### LESSON 6 - MAINTAIN AN AZURE AI SEARCH SOLUTION

- Manage security of an Azure AI Search solution
- Optimize performance of an Azure AI Search solution
- Manage costs of an Azure AI Search solution
- Improve reliability of an Azure AI Search solution
- Monitor an Azure AI Search solution
- Debug search issues using the Azure portal

### LESSON 7 - PERFORM SEARCH RERANKING WITH SEMANTIC RANKING IN AZURE AI SEARCH

- What is semantic ranking?
- Set up semantic ranking

### LESSON 8 - PERFORM VECTOR SEARCH AND RETRIEVAL IN AZURE AI SEARCH

- What is vector search?
- Prepare your search
- Understand embedding