

# **Capstone Projects:**

Real Time Business Scenario using Azure Al Fundamentals



### **Image Classification with Azure Custom** Vision

Train a model to recognize and classify images using Azure Custom Vision service.



### **Sentiment Analysis with Text Analytics API**

Analyze customer reviews or feedback to detect sentiment using Azure Cognitive Services.



#### **Build a Chatbot with Azure Bot Service**

Create a simple Q&A chatbot using Azure Bot Framework and integrate it with Azure QnA Maker or Azure Al Search.



### **Language Translation using Translator Text** API

Translate text between languages using Azure Cognitive Services' Translator API.



### Speech-to-Text Transcription App

Convert spoken audio files into readable text using Azure Speech-to-Text service.



### Form Recognition with Azure Form Recognizer

Extract structured data from invoices or receipts using Al-powered OCR with Form Recognizer.

# **AZURE AI FUNDAMENTALS COURSE SYLLABUS**

**Duration: 40 hrs** 

### Section 1: Introduction to Azure Al

- Overview of AI and machine learning
- Introduction to Microsoft Azure Al services
- Setting up Azure environment and tools

## Section 2: Machine Learning with Azure

- Basics of machine learning
- Azure Machine Learning Studio
- Creating and managing machine learning models

# Section 3: Natural Language Processing (NLP)

- Fundamentals of NLP
- Using Azure Text Analytics
- Implementing conversational AI with Azure Bot Services

# **Section 4: Computer Vision**

- Image analysis with Azure Computer Vision
- Building and deploying image recognition models
- Optical Character Recognition (OCR) with Azure

## **Section 5: Speech Services**

- Introduction to Azure Speech Services
- Speech-to-text and text-to-speech conversion
- Real-time speech translation

# **Section 6: Azure Cognitive Services**

- Introduction to Azure Speech Services
- Speech-to-text and text-to-speech conversion
- Real-time speech translation

# **Section 7: Data Preparation for AI**

- Data preprocessing techniques
- Data storage and retrieval in Azure Data Lake
- Connecting AI models with Azure databases

### **Section 8: AI Solution Deployment**

- Deploying AI models using Azure Kubernetes Service (AKS)
- Integration with Azure DevOps
- Monitoring and optimizing deployed AI solutions

## Section 9: Ethics and Responsible Al

- Al ethics and best practices
- Implementing Responsible AI principles
- Ensuring fairness, transparency, and accountability

# **Section 10 : Capstone Project**

- Real-world Azure Al project
- End-to-end solution development
- Project review & certification

# **SKILLS AND TOOLS**

# **Tools Covered**

**Azure Machine** Learning Studio **Azure Cognitive** Services

Azure Al Language / Translator

**Azure Bot** Service

**Custom Vision** 











Face API

Speech Services

**Azure Portal** 

Microsoft Learn Sandbox









# **Skills Covered**

**Al Concepts** 

Machine **Learning Basics**  Computer Vision

Natural Language Processing (NLP)









Azure Al Services Responsible AI & **Ethics** 





# Earn your Al 900 Course **Completion Certificate**

Credo Systemz's certificate is highly recognized by 30K Global companies around the world.



# WHAT OUR TRAINEE SAYS?



4.7 \*\*\*\*

The trainer explained cloud concepts clearly with real-life examples, making it easy to understand for beginners. Practice sessions and doubt clearing were really helpful for building a strong foundation.



#### Nirosha

The course was well-structured with handson labs for each topic, which improved my practical skills. The trainer's guidance on managing Azure resources and services was excellent.



### Karthik M

 $5.0 \star \star \star \star \star$ 

The sessions focused on design patterns, architecture scenarios, and case studies that matched the exam syllabus. The instructor made complex concepts simple with diagrams and live use cases.



### **Srinivasan**

4.9 \*\*\*

The training covered pipelines, CI/CD, and DevOps practices in a very practical way. Tools like Azure DevOps and GitHub Actions were taught with real-time project examples.



### **Priya**



Security topics like IAM, Defender for Cloud, and Key Vault were explained with clarity. Lab exercises boosted my confidence to handle security tasks in a real environment.



#### Renuka Devi



Networking concepts like VNets, VPNs, and routing were made easy with step-bystep labs. The trainer's deep knowledge and support throughout the course were very helpful.

# **CHENNAI**

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