REPORT FOR

FIVE-DAY FACULTY DEVELOPMENT PROGRAM

ON

"MICROSOFT AZURE AI ENGINEER ASSOCIATE"

04th August – 08th August 2025

ORGANIZED BY

Department of Computer Science & Engineering

Nalla Narasimha Reddy Group of Institutions
(UGC Autonomous)

Organizers: 1. Dr. K. Rameshwariah, Convener & HoD, CSE

                     2. Dr. K. Srinivasa Babu, Professor, CSE

                     3. Dr. S. Sree Hari Raju, Associate Professor, CSE

Resource Person: **Mr. S. Gopinath**
                     Senior Technical Trainer
                     ICT Academy, Tamil Nadu.

FDP INVITATION

NALLA NARASIMHA REDDY GROUP OF INSTITUTIONS
(UGC AUTONOMOUS)
Chowdariguda, Medchal (Dist.), Hyderabad – 500088.

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Cordially invites you
For the Inaugural Function of
Five-Day Faculty Development Program
on

"Microsoft Azure AI Engineer Associate"

Resource Person
Mr. Gopinath. S
Senior Technical Trainer
ICT Academy, Chennai
Tamil Nadu, India.

Date & Time: 04ᵗʰ August to 08ᵗʰ August 2025 @ 09:30 AM

Venue: CC – IV, 1ˢᵗ Floor

Sri Nalla Narasimha Reddy	**Mr. Nalla Prashanth Reddy**
Chairman	*Vice Chairman*
Nalla Narasimha Reddy Group of Institutions	Nalla Narasimha Reddy Group of Institutions

Dr. C. V. Krishna Reddy
Director
Nalla Narasimha Reddy Group of Institutions

Dr. G. Janardhana Raju	**Dr. K. Rameshwaraiah**
Dean – School of Engineering	*Convener & Head-CSE*
Nalla Narasimha Reddy Group of Institutions	Nalla Narasimha Reddy Group of Institutions

Introduction

The main aim of organizing this FDP was to give the awareness and knowledge of "Azure AI Services" to faculty because of NLP solutions with Azure AI Service, AI Document Intelligence is an ever-evolving field, the use of Speech Synthesis Markup Language, and extracting data from a custom form. For any given complex data set, data analysis is to identify, analyze, and interpret trends or patterns which is helpful in filtering and cleaning data. Data Science is a multidisciplinary approach that combines principles and practices from the fields of mathematics, statistics, artificial intelligence, and computer engineering to analyze large amounts of data. This course builds confidence in using Python, preparing participants for more advanced study in Machine Learning, Artificial Intelligence, and Data Science.

Course Contents

This program will focus on picking the right complexity, preventing overfitting, regularization, assessing uncertainty, weighing trade-offs, and model evaluation.

The major topics to be covered are:

- ✓ Analyze images with Azure AI Vision
- ✓ Use the Read API
- ✓ Use patterns to differentiate similar utterances
- ✓ Analyze a document using Azure AI Document.
- ✓ Construct code from natural language.

Course Objectives
- ✓ As a refreshment program for faculty to enhance their skills in Azure AI
- ✓ Faculty are trained to develop in-house projects.
- ✓ To gain knowledge of how to do data predictions and analyze the predicted data.

	Microsoft Azure AI Engineer Associate		
Sno	**Topic**	**Subtopic**	**Methodology**
1	Get started with Azure AI Services	Define Artificial intelligence and AI related terms	Lecture, Discussion
		Create and consume Azure AI services	
		Provide Azure AI service resources, use rest API and SDK	
		Lab: Use Azure AI services	Hands on
2	Azure AI Services, Security, Containers	Consider Authentication, Implementing network security	Lecture, Discussion
		Exercise: Manage Azure AI Services security	Hands on
		Introduction Monitor cost, Create alerts, view Metrics, Manage diagnostic logging	Lecture, Discussion
		Lab: Monitor Azure AI services	Hands on
		Understanding Container, Use Azure AI services containers	Lecture, Discussion
		Lab Use a Container	Hands on
3	Create computer vision solutions with Azure AI Vision		Lecture, Demonstration,
		Provision Azure AI vision resources, Analyse an	
		Lab: Analyze images with Azure AI Vision	Hands on
		Identify options for face detection analysis and	Lecture, Demonstration,
		Exercise - Detect, analyze, and identify faces	Hands on
		Explore Azure AI Vision options for reading text	
		Use the Read API, Exercise - Read text in images, Understand Azure Video Indexer capabilities	
		Use Video Analyzer widgets and APIs	
		Lab - Analyze video	Hands on
4		Provision an Azure AI Language resource	
		Detect language, extract key phrases, Analyze sentiment,	
		Lab: Analyst text	Hands on
5	Develop natural language processing solutions with Azure AI Services	Compare question answering to Azure AI Language understa	Lecture, Discussion
		Understand resources for building a conversational language	understanding model
		Improve question answering performance	
		Lab - Create a question answering solution	Hands on
		Define intents, utterances, and entities	Lecture, Demonstration, Hands on
		Use patterns to differentiate similar utterances	
		Train, test, publish, and review a conversational language	
		Lab - Build an Azure AI services conversational language	Hands on
		Understand language detection, translation, and	Lecture, Demonstration
		Define custom translations	
		Lab - Translate text with the Azure AI Translator service	Hands on
		Use the Azure AI Speech to Text API	Lecture, Demonstration
		Configure audio format and voices	
		Use Speech Synthesis Markup Language	
		Exercise - Create a speech-enabled app	Hands on
		Provision an Azure resource for speech translation	Lecture, Demonstration, Hands on
		Translate speech to text	
		Synthesize translations,	
		Lab: Translate speech	Hands on
6	Implement knowledge mining with Azure AI Search	Create an Azure AI Search solution	Lecture, Demonstration, Hands on
		Understand search components	
		Understand the indexing process	
		Lab - Create a search solution	Hands on
		Create a custom skill	Lecture, Demonstration, Hands on
		Add a custom skill to a skillset	
		Lab - Implement a custom skill	Hands on
7	Develop solutions with Azure AI Document Intelligence	Plan an Azure AI Document Intelligence solution	Lecture, Demonstration, Hands on
		Lab - Analyze a document using Azure AI Document	
		Get started with Azure Document Intelligence	Lecture, Demonstration, Hands on
		Lab - Extract data from custom forms	
		Get started with Azure OpenAI Service	Lecture, Demonstration, Hands on
		Use prompts to get completions from models	
8	Develop Generative AI solutions with Azure OpenAI Service	Test models in Azure AI Studio's playground	
		Lab - Get started with Azure OpenAI Service	
		Write more effective prompts	Lecture, Demonstration, Hands on
		Lab - Utilize prompt engineering in your application	
		Construct code from natural language	Lecture, Demonstration, Hands on
		Complete code and assist the development process	
		Lab- Generate and improve code with Azure OpenAI Service	Hands on
		Explore DALL-E in Azure AI Studio	Lecture, Demonstration, Hands on
		Use the Azure OpenAI REST API to consume DALL-E models	
		Lab - Generate images with a DALL-E model	Hands on
9	Discussion		

The course is designed to provide knowledge on Microsoft Azure with AI, AI Services, Security, Containers, AI Vision, NLP Solutions with AI Services, Develop AI Document Intelligence and Open AI Service.

Outcome: Illustrate different concepts of Services in Azure AI.

Hardware Requirements

- i3 or above Processor is required.
- 4 GB or above RAM is recommended.
- Good Internet Connectivity
- OS – Windows 10 is Preferable
- Projector

Faculty Development Program Poster

SL No	Faculty Name	College Name
1	Pillala Sathish	AVN Institute of Engineering and Technology, Ibrahimpatnam
2	Ramavath Ramesh	AVN Institute of Engineering and Technology, Ibrahimpatnam
3	Dr K Srinivas	BJR Government Degree College, Nampally
4	P Sathya Narayana Reddy	BJR Government Degree College, Nampally
5	D.Chaithanya	CVR College of Engineering, Ibrahimpatnam
6	S Bhargav	CVR College of Engineering, Ibrahimpatnam
7	D. S. V. Jyothi	Geethanjali College of Engineering and Technology, Keesara Mandal
8	P. Sobharani	Geethanjali College of Engineering and Technology, Keesara Mandal
9	Dr. K. Rameshwaraiah	Nalla Narasimha Reddy Group of Institutions
10	Dr. K. Srinivas Babu	Nalla Narasimha Reddy Group of Institutions
11	Dr. N. Ravi Shankar	Nalla Narasimha Reddy Group of Institutions
12	Dr. S. Sree Hari Raju	Nalla Narasimha Reddy Group of Institutions
13	Dr. Santhosh Kumar Medishetti	Nalla Narasimha Reddy Group of Institutions
14	Mr. J. Pavan Kumar	Nalla Narasimha Reddy Group of Institutions
15	Mr. Mattepalli Praneeth Kumar	Nalla Narasimha Reddy Group of Institutions
16	Mr. Murthujavali.B	Nalla Narasimha Reddy Group of Institutions
17	Mr. S. Sridhar Reddy	Nalla Narasimha Reddy Group of Institutions
18	Mr. S. Srikanth Reddy	Nalla Narasimha Reddy Group of Institutions
19	Mr. Tadi UdayaKiran	Nalla Narasimha Reddy Group of Institutions
20	Ms. Ch. Ramya	Nalla Narasimha Reddy Group of Institutions
21	Ms. G. Jyothi	Nalla Narasimha Reddy Group of Institutions
22	Ms. M. Revathi	Nalla Narasimha Reddy Group of Institutions
23	Shaik Feroz	Nalla Narasimha Reddy Group of Institutions
24	Dr Shoban Mude	Narsimha Reddy Engineering College, Medchal Mandal
25	Mr E Gangaram	Narsimha Reddy Engineering College, Medchal Mandal
26	Bandam Naresh	Pallavi Engineering College, Hyderabad
27	Humera fatima	Priyanka Degree & PG College for Women, Hyderabad
28	Meher Sultana	Priyanka Degree & PG College for Women, Hyderabad
29	Saleem Unnisa	Rukmini College of Management and Commerce, Hyderabad
30	Samsa Begum	Rukmini College of Management and Commerce, Hyderabad
31	B Sangeetha	Vignan's Institute of Management and Technology for Women
32	N.Sreeja	Vignan's Institute of Management and Technology for Women

Academic Year: 2025-2026

Activity: Faculty Development Program on **"Microsoft Azure AI Engineer Associate"**

Consolidated Report

As per the schedule in the department's academic plan, an FDP on **"Microsoft Azure AI Engineer Associate"** was conducted from **04-08-2025** to **08-08-2025** for faculty members. A total of 32 faculty members have actively participated in the Faculty Development Program, with 15 faculty from the host institute and the remaining 17 members from other colleges. **S. Gopinath,** Senior Technical Trainer, ICT Academy, Tamil Nadu, is the resource person for the FDP.

Day 1 (07-08-2023): Inauguration of the FDP started at 09:30 AM, ***Dr. K. Rameshwaraiah – Convener & Head CSE,*** started with a Keynote address by saying the importance of technology in day-to-day life and since we are in the teaching profession, how we need to update our knowledge with the latest technology and make the students practice with the technology, so that, they can be ready for industry requirements.
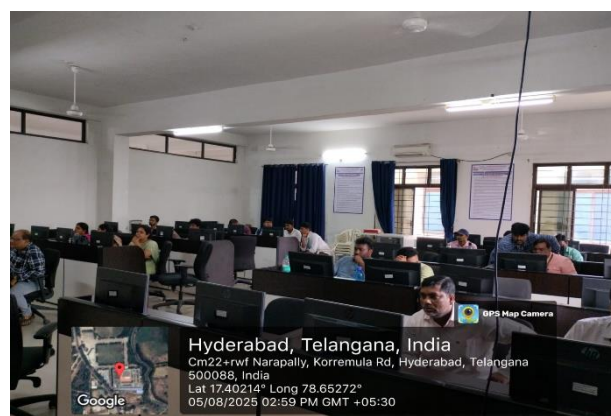
Mr. Gouse Pasha, Relationship manager, ICT Academy, gave a glimpse about ICT Academy, when & where started, and what services it is providing for Educational Institutes across the country.

Ms. S. Radhika then read the trainer profile of ***Mr. S. Gopinath,*** Senior Technical Trainer, ICT Academy followed by starting the session.
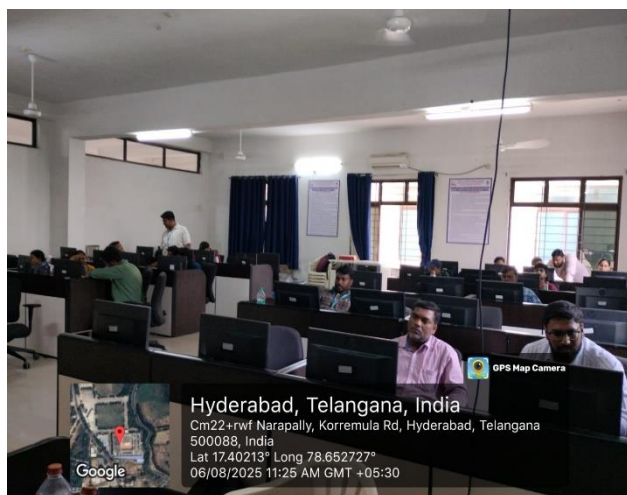
The trainer continued with the session topic of AI Fundamentals, Get started with Azure AI Services – Create and consume Azure AI services, provide Azure AI service resources, use the REST API and SDK, and Lab: Use Azure AI services.

Day 2 (05-08-2025): The trainer revised the previous day's topic and continued with the Day 2 session with the topics of Create computer vision solutions with Azure AI Vision – Identify options for face detection analysis. Exercise – Detect, Analyze, and Identify faces and so on.

Day 3 (06-08-2025): The trainer revised the previous day's topic and continued with the Day 3 session with the topics of Develop Natural Language Processing Solutions with Azure AI Services – Understand resources for building a conversational language. Lab _ Create a question answering solution and so on.

Day 4 (07-08-2025): The trainer revised the previous day's topic and continued with the Day 4 session with the topics of Implement knowledge mining with Azure AI Search solutions, understanding search components, and understanding the indexing process. Lab – Create a search problem and so on.

Day 5 (08-08-2025): The trainer revised the previous day's topic and continued with the Day 5 session with the topics of Develop Generative AI solutions with Azure Open AI Service. Lab – Get started with Azure OpenAI service and so on.

VALEDICTORY PHOTOS

Dr. K. Rameshwaraiah, Convener & Head-CSE, concluded the FDP by giving a glimpse of 5-days session

Participation Certificates

NALLA NARASIMHA REDDY
Education Society's Group of Institutions - Integrated Campus
(UGC AUTONOMOUS INSTITUTION)

EAMCET/ECET/ICET/PGECET Code **NNRG**

ICTACADEMY®

CERTIFICATE OF PARTICIPATION

CNo: 025-225330
08-08-2025

MS. G. JYOTHI

Nalla Narasimha Reddy Education Societys Group of Institutions

has participated in one week Faculty Development Program on

Microsoft Azure AI Engineer Associate

conducted by ICT Academy on 04-08-2025 to 08-08-2025 at

Nalla Narasimha Reddy Education Societys Group of Institutions

In association with

Microsoft

Srikanth V
Chief Executive Officer (i/c)
ICT Academy

verify.ictacademy.in

Participants Group Photo

Faculty Coordinator   Head-CSE