

# Welcome to AI

Artificial Intelligence (AI) technologies are reshaping how telecom service providers' networks operate resulting in more efficient operation that reduces costs and increases savings. Together, these solutions allow networks to operate at web-scale and provide customers with unprecedented levels of agility and flexibility.

## Intended Audience

The course is intended for all audiences that are interested in understanding how Automation and AI are changing the telecommunications industry.

## Objectives

After completing this course, the student will be able to:

- Give examples of AI in action
- Sketch the AI and Automation Lifecycle
- Articulate how AI changes the telecommunications industry
- List some of the AI Use Cases

## Prerequisites

- None

## Required Equipment

- None

## Course Outline

### 1. What is AI?

- 1.1 Types of AI
- 1.2 Define in nine

### 2. AI concepts

- 2.1 AI terms and concepts

### 3. Neural Networks

- 3.1 What is Neural Networks?
- 3.2 Neural Networks in action

### 4. AI and Automation lifecycle

- 4.1 Lifecycle overview
- 4.2 Model creation
- 4.3 Model Deployment
- 4.4 Automation and Human Intervention
- 4.5 AI and Automation Lifecycle in the Telecom Industry

### 5. Impact of AI on Telecom

- 5.1 AI, Analytics and Automation
- 5.2 Strategic goals

- 5.3 Priority areas for CSP AI, ML activities

### 6. AI focus areas

- 6.1 Interaction focus, Complex communication
- 6.2 Pattern detection, Process automation, Decisioning

### 7. AI Use Cases in Telecom

### 8. AI Use Cases that impact a Telecom Network

- 8.1 Streaming Service, IoT
- 8.2 VR/AR
- 8.3 Autonomous cars

### 9. Course Summary