

## MS-MS721T00: PLAN, CONFIGURE, AND MANAGE COLLABORATION COMMUNICATIONS SYSTEMS WITH MICROSOFT TEAMS

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Intermediate	Microsoft 365	Instructor-led	NA

### INTRODUCTION

This course prepares IT professionals to become Collaboration Communications Systems Engineers. Participants will learn how to plan, configure, deploy, manage, and troubleshoot Microsoft Teams-based collaboration systems, including Teams Phone, Microsoft Teams Rooms, Teams Premium, and other certified devices. Learners will engage in hands-on labs and real-world scenarios that emphasize secure collaboration practices like least privilege access, identity protection, conditional access, and threat monitoring using Microsoft Defender and Teams admin tools

### AUDIENCE PROFILE

Collaboration Communications Systems Engineers are responsible for planning, deploying, configuring, maintaining, and troubleshooting collaboration communication systems that include Microsoft Teams Phone, Microsoft Teams meetings, Microsoft Teams Premium, Microsoft Teams Rooms, flexible workspaces, and other certified and supported devices. They have a fundamental understanding of networking, telecommunications, audio/visual and meeting room technologies, and identity and access management. They're also proficient in managing collaboration and communications solutions by using Microsoft Teams admin center, Microsoft Teams Rooms Pro Management portal, PowerShell, and Microsoft Call Quality Dashboard.

To succeed in their role, they collaborate with Teams administrators, Microsoft identity and access administrators, Microsoft 365 administrators, and owners of other workloads, including facilities managers, network engineers, security engineers, device manufacturers, telephony providers, and Microsoft Certified solution providers.

### PREREQUISITES

Before attending this course, students should have intermediate knowledge of the following:

- Microsoft 365 and Microsoft Teams
- Networking, telecommunications, and audio/visual basics
- Identity and access management basics

### COURSE OBJECTIVES

After completing this course, students will be able to:

- Design and implement Teams Phone with PSTN connectivity (Calling Plans, Operator Connect, Direct Routing)
- Manage Teams meetings, webinars, and town halls
- Configure Microsoft Teams Rooms and Surface Hub devices
- Monitor and optimize performance using Teams admin tools, PowerShell, and the Call Quality Dashboard
- Apply identity and access management best practices

### COURSE CONTENT

#### Module 1: Introduction to Teams meetings and calling

This module provides an overview of Microsoft Teams communication and collaboration options: Teams phones, auto attendants, call queues, meeting room devices, and different meeting types. It covers the benefits and limitations of Teams Phone, while also highlighting the importance of

Teams devices in modern workplaces.

Lessons

- Introduction
- Overview of Teams meetings and events
- Overview of Teams Phone
- Overview of auto attendants and call queues
- Overview of Teams clients
- Overview of Microsoft Teams Rooms and phones

- Overview of Microsoft 365 Copilot in Teams calling, meetings, and devices
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Differentiate between different meeting and event types in Teams.

- Identify Teams Phone scenarios and PSTN options.
- Identify usage scenarios for auto attendants and call queues.
- Plan for meeting rooms and shared spaces with Microsoft Teams Rooms and other devices.
- Plan for Microsoft 365 Copilot in Teams

## Module 2: Plan for Teams Phone

Learn about Microsoft Teams Phone and what is needed to make and receive phone calls, and plan for Teams Phone devices, features, and cloud voicemail.

### Lessons

- Introduction
- Plan to deploy Teams Phone
- Plan for Teams Phone PSTN connectivity
- Determine license requirements
- Plan for Teams Phone devices
- Plan and design Teams Phone features
- Plan for voicemail
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Plan for a basic Teams Phone deployment
- Plan for advanced Teams Phone calling options
- Plan for Teams phones and devices

## Module 3: Plan for Microsoft Teams Rooms and Shared meeting spaces

Microsoft Teams Rooms are a great way to collaborate with your coworkers in and outside your organization. It lets you join scheduled meetings in a comfortable way without logging in into to compute unit of the room device. To get started with Microsoft Teams Rooms, you need to understand the differences and potential use cases of the different Teams Room devices, the way how these devices are technically managed, which licenses are needed and what it important for a user-friendly physical room installation.

### Lessons

- Introduction
- Determine license requirements for Microsoft Teams Rooms and shared devices

- Overview of Microsoft 365 Copilot and Microsoft Teams Rooms
  - Understand the differences between Microsoft Teams Rooms on Android and Windows
  - Understand Microsoft Teams Rooms on Surface Hub 2S
  - Understand and plan Teams Room accessories, components, and peripherals
  - Integrate Teams with third-party or existing conferencing solutions
  - Understand Teams Rooms management options
  - Knowledge check
  - Summary and resources
- After completion of this module, you'll be able to:

- Select the most suitable Teams Rooms configuration for your organization.
- Plan and design modern, intelligent workspaces that foster collaboration.
- Choose the appropriate licenses and devices based on your organizational needs.
- Integrate third-party meeting services for a seamless hybrid work experience.
- Manage and monitor Teams Rooms devices effectively to ensure optimal performance.

## Module 4: Plan and optimize network performance for Teams media

For real-time media in Microsoft Teams, network performance is key to a good user experience. In this module, we cover Teams real-time network requirements and how to optimize your network for Teams real-time media.

### Lessons

- Introduction
- Understand Teams network requirements
- Evaluate network specifications
- Design network for media optimization
- Design and validate VPN split tunnelling
- Configure media bit rate for Teams
- Design and implement QoS
- Knowledge check
- Summary and resources

After completion of this module, you will be able to:

- Describe network requirements for optimal performance in Teams
- Evaluate bandwidth requirements with the Teams Network planner

- Assess network using the Teams Network Assessment Tool
- Optimize network and Wi-Fi for media flow
- Optimize media flow with QoS

## Module 5: Configure and deploy Teams Phone

Before Microsoft Teams Phone users can make or receive calls and use advanced features, phone numbers must be assigned and Microsoft Calling plans or Operator Connect must be configured.

### Lessons

- Introduction
- Configure emergency calling for Teams Calling Plans
- Manage and configure Microsoft PSTN numbers
- Configure Operator Connect and Teams Phone Mobile
- Configure Teams Phone policies
- Create and manage Teams policies
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Configure emergency calling addresses
- Manage Microsoft Calling Plan numbers
- Setup and manage Operator Connect and Teams Phone Mobile
- Understand Teams Phone policies and configuration options

## Module 6: Configure and deploy Teams Phone with Direct Routing

In this module, you'll learn how administrators configure Teams Phone with Direct Routing to meet user needs for telephony through a PSTN.

### Lessons

- Introduction
- Design Direct Routing call flows
- Implement SIP trunking with Direct Routing
- Configure Emergency Calling for Direct Routing
- Extend Teams Direct Routing infrastructure
- Deploy and maintain a survivable branch appliance
- Knowledge check
- Summary and resources

After completion of this module, you will be able to:

- Explain how to configure and connect a Session Border Controller (SBC).

- Describe the process for configuring simple and advanced voice routing.
- Describe how to provision users, implement number translation, create, and assign dial plans.
- Explain how to configure and connect a Survivable Branch Appliance (SBA).

## Module 7: Extend Teams Phone with additional services

Teams Phone leverages other Microsoft services and can be extended with third-party solutions for policy-based compliance recording, contact center integration, and custom bots.

### Lessons

- Introduction
- Understand how Teams interact with additional services
- Configure compliance recording in Teams
- Configure and integrate a certified contact center in Teams
- Design and deploy voice bots in Teams
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Describe how Teams Phone interacts with other Microsoft services.
- Configure and integrate third-party policy-based compliance recording.
- Configure and integrate third-party contact center solutions.
- Design and register Voice Bots for custom-developed solutions.

## Module 8: Manage meetings and events experiences

Learn how to manage and configure meetings and events with Microsoft Teams, including town halls, webinars, and audio conferencing.

### Lessons

- Introduction
- Explore meetings and events in Microsoft Teams
- Configure meeting settings
- Create and manage meeting policies
- Configure audio conferencing
- Create and manage meeting templates and template policies
- Create and manage meeting customization policies
- Explore webinars and town halls with Teams Premium

- Create and manage events policies
- Explore immersive spaces in Teams
- Knowledge check
- Summary

After completion of this module, you will be able to:

- Describe meetings and events in Microsoft Teams
- Manage audio conferencing policies and settings
- Manage meeting policies and settings
- Manage webinars and town halls
- Configure Teams policies and settings for Microsoft Copilot for Microsoft 365

## Module 9: Guided project - Create and assign Teams policies to meet business requirements in Microsoft Teams

In this module, you'll prepare your Microsoft 365 developer tenant to be ready for the usage of Microsoft Teams Rooms. You'll create the tenant from scratch, change security-related settings, and prepare Microsoft Teams Rooms-specific tasks.

This is a Guided Project module where you complete an end-to-end project by following step-by-step instructions.

### Lessons

- Introduction
- Prepare
- Exercise - Create a security group
- Exercise - Create and assign a messaging policy in the Teams admin center
- Exercise - Create a meeting policy and assign with PowerShell
- Knowledge check
- Summary

In this guided project, you'll be able to:

- Create a security group
- Create and assign a messaging policy in the Teams admin center
- Create a meeting policy in Teams admin center and assign it with PowerShell

## Module 10: Configure and manage voice users

Ongoing management is required as new employees start, or if their needs change. Learn how to manage voice user configuration, including enabling voice services and adjusting voice configuration.

### Lessons

- Introduction

- Enable users for Teams Phone
- Enable users for Direct Routing with Teams Phone
- Enable additional calling features for Teams Phone
- Enable users for Teams Phone Mobile
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Enable users for Teams Phone using Calling Plans, and Teams Phone Mobile or Operator Connect if it's configured for your tenant
- Enable users for Direct Routing
- Manage per-user options for Teams Phone

## Module 11: Configure auto attendants and call queues

Understand how auto attendants and call queues in Microsoft Teams can interact with callers to ensure they're connected to your agents as quickly as possible. You'll also learn how to set up auto attendants and call queues.

### Lessons

- Introduction
- Design call flows for auto attendants and call queues
- Configure auto attendants and call queues
- Deploy a channel-based call queue
- Configure resource accounts
- Configure Microsoft 365 groups for voicemail
- Interpret call queue conference modes
- Interpret call queue routing methods
- Configure holidays for auto attendants and call queues
- Configure custom music on hold
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Describe the differences between auto attendants and call queues.
- Design an auto attendant to gather information from callers.
- Explain how to set up auto attendants to implement your plan.
- Demonstrate how to plan call queues to manage many callers.
- Describe how to configure call queues to alert agents and route calls.
- Explain how to plan licensing for auto attendants and call queues.

## Module 12: Configure, deploy, and manage Teams devices

Teams devices provide a familiar experience and are essential for a hybrid workspace. Learn how to provision and manage devices, and associated device accounts.

### Lessons

- Introduction
- Manage Microsoft Teams Phones
- Manage Microsoft Teams Room Systems
- Microsoft Teams Rooms management options
- Manage Surface Hub 2S devices
- Configure Microsoft Teams SIP gateway
- Manage Microsoft Teams displays
- Remote provisioning and sign-in for Teams Phone
- Update Microsoft Teams devices remotely
- Manage Microsoft Teams device tags
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Understand scenarios for using Teams phones, Teams displays, and Microsoft Teams Rooms with voice services.
- Differentiate between the different options for deployment and management of devices.
- Deploy Teams phones and Teams displays.
- Configure Teams Phone for Microsoft Teams Rooms.
- Manage Teams devices in the Teams admin center and

Teams Rooms Pro Management Portal.

## Module 13: Guided project - Prepare meeting room experiences

In this module, you'll prepare your Microsoft 365 developer tenant to be ready for the usage of Microsoft Teams Rooms. You'll create the tenant from scratch, change security related settings, and prepare Microsoft Teams Rooms specific tasks.

This is a Guided Project module where you complete an end-to-end project by following step-by-step instructions.

### Lessons

- Introduction
- Prepare
- Exercise - Create dynamic security group
- Exercise - Configure security settings
- Exercise - Create room resource accounts
- Exercise - Configure mailbox properties
- Knowledge check
- Summary

In this guided project, you'll:

- Prepare the Microsoft 365 tenant for Microsoft Teams Rooms deployment
- Create dynamic groups following best practice
- Disable multi-factor authentication for Microsoft Teams Rooms resource accounts
- Configure room mailbox properties

## Module 14: Monitor and troubleshoot Teams collaboration communications systems

Troubleshooting is an important task that includes troubleshooting of phone number assignment, call failure and quality issues, client issues, and device issues. Call Analytics, Call Quality Dashboard, and the Teams Rooms Pro portal are also covered for monitoring, reporting, and troubleshooting.

### Lessons

- Introduction
- Diagnose and troubleshoot phone number assignment
- Diagnose and troubleshoot Teams client issues
- Diagnose and troubleshoot call failure and call quality issues
- Report on and troubleshoot Teams calls with Call Quality Dashboard
- Diagnose and troubleshoot Direct Routing issues
- Troubleshoot and monitor Teams devices
- Troubleshoot Teams meetings and calling
- Troubleshoot Teams Rooms devices
- Knowledge check
- Summary and resources

After completion of this module, you'll be able to:

- Diagnose and troubleshoot phone number assignment
- Diagnose and troubleshoot Microsoft Teams client issues
- Diagnose and troubleshoot call failures and quality issues
- Report on and troubleshoot Teams calls with the Call Quality Dashboard (CQD)
- Diagnose and troubleshoot Direct Routing issues
- Troubleshoot and monitor Teams devices using the Teams Rooms Pro portal

## ASSOCIATED CERTIFICATIONS & EXAMS

This course will prepare delegates to write the Microsoft MS-721: Collaboration Communications Systems Engineer exam.