

## Certified Allied Telesis Technician - CAT

**Duration:** 3 day, Classroom based, Instructor led

**Language:** English

### Certification Requirements:

- Attendees will be required to pass an on-line exam on completion of the course. The title of Certified Allied Telesis Technician (CAT) will be awarded to all attendees that receive a passing score on the exam.

### Introduction:

- This course is aimed at technicians installing and configuring the Allied Telesis edge switches. The objective of this 3-day course is to transfer knowledge to those customers who are typically selling installation and maintenance services to their customers and thus need to ensure that they have enough skilled technicians to do so. The course is designed to give the participants the theory behind configuration tasks, and the opportunity to try the configurations. Simple networking debugging scenarios will be explained.

### Prerequisites:

- A good basic theoretical knowledge of networking concepts

### Intended Audience:

Technicians installing the active and passive elements in networking projects who install and maintain the Allied Telesis edge switches. The training is designed to provide to all participants the opportunity to do practical tests and to obtain the necessary knowledge to install and manage these products in complex environments.

### Scheduling:

- To schedule a class or to get more information, please use our website:  
[www.alliedtelesis.co.uk](http://www.alliedtelesis.co.uk) → Service&Support → Training

or contact [Training.EU@alliedtelesis.com](mailto:Training.EU@alliedtelesis.com)

### Objectives:

- After completion of the course the course attendees will be able to:
  - Describe the differences between layer 2 and layer 3 switches
  - Understand how networks are architecturally split into the edge and the core sections
  - Identify the key criteria for deploying layer 2 or layer 3 switches in a basic network design
  - Understand the operation and utilization of VLANs on all the important Allied Telesis edge switches.

- Understand the concepts and implementation of the different Spanning Tree Protocol implements available, and how they can improve network stability.
- Understand and use the different configuration methods available for Allied Telesis edge switches, using both the CLI and GUI.

### Training is relevant for the following products:

- AT-8000S
- AT-8000GS
- AT-8500
- AT-9400Ts
- AT-x600

### Outline:

- **Introduction:** This general module starts the course and provides the logistics for the students. It also includes an overview of the modules within the course.
- **Service and Support:** This short standard module provides contact information and also an information about Net.Cover support.
- **Hardware overview:** This should be a single slide overview of where the products fit in the portfolio. The objective is only to provide an overview, and not review the product features.
- **Operations:** This module is a key to the success of the course and provides the cornerstone to all other modules. It covers all the supported platforms. Relative importance of the platforms in this course:
  - 8000S/GS
  - AT-Sxx (OS of AT-8500/9400)
  - Alliedware Plus

The CLI and also the GUI will be used in the course, and should be described (Note: it is not necessary to describe the individual GUI screens). It is important to allow enough time that students understand the concepts and also afterwards put them into practice in the lab sessions.

- Serial port and client software configuration
- User name and password concept
- Levels of access, command line structure, and function keys
- Help, command completion
- Storage architecture ( running, startup, current, flash, etc). What is booted, etc.

- Licensing (Firmware-, Feature-Keys)
  - File system and commands, external device support
  - Reboot, restart of switches
  - Basic “show” commands
  - Set, do, exec command concepts
  - Firmware upgrade
  - L2/L3 switching concepts, and how they affect management
  - Configure initial IP and GUI, and TELNET
  - Port names, ranges and basic Level 1 configurations.
  - Switching
  - IP ICMP commands
  - Power-over-Ethernet
  - Lab session
- **VLAN:**
- Types, terminology and uses
  - VID
  - Port VLAN
  - Trunk VLAN
  - Private VLAN
  - Lab session
- **Spanning Tree:**
- Concept and description of different types
  - RSTP
  - MSTP (only overview)
  - Lab session
- **Trunking/Aggregation:**
- Terminology and static vs. LACP
  - static aggregation configuration
  - LACP configuration
  - Lab session

- **Stacking (edge switches):**
  - Different stacking concepts
  - configuration
  - Lab session
  
- **Layer 3 overview:**
  - short overview IP, subnet, gateway
  - static routing concept
  - Ports, and interface IP configuration syntax
  - Short dynamic routing overview
  
- **DNS, DHCP Internet utilities :**
  - Overview
  
- **NAC overview:**
  - Concepts of Network Access control
  - Very simple configuration examples
  
- **Debugging and troubleshooting**
  - Event logging
  - SNMP
  
- **On-line certification exam**