



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

High Volume Server Computer Cabling Installation Training

Physical, Mathematical, Computer and Life Sciences / Information Technology and Computer Sciences

Unit Standard 114057 · NQF Level 5 · 10 Credits · 7 Days

COURSE OVERVIEW

This course equips learners with the skills to install high-volume server computer cabling systems in accordance with industry standards and safety regulations. Participants will gain practical knowledge of cabling infrastructure, termination techniques, and testing procedures to ensure reliable network performance.

Category	Physical, Mathematical, Computer and Life Sciences
Subfield	Information Technology and Computer Sciences
Unit Standard	114057
Accreditation	SAQA Accredited · NQF Level 5 · 10 Credits
Duration	7 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate compliance with safety regulations and cabling standards during installation.
- Plan and prepare cabling layouts for high-volume server environments.
- Terminate and test various cabling types, including fibre optic and copper.
- Apply cable management techniques to ensure optimal airflow and accessibility.
- Troubleshoot common cabling issues using testing equipment.
- Document installation activities and maintain accurate records.

WHO SHOULD ATTEND

- This course is designed for IT technicians, network installers, and telecommunications professionals who are responsible for installing and maintaining high-density server cabling in data centres or enterprise environments.

COURSE OUTLINE

Day 1: Introduction to High Volume Server Computer Cabling

- Overview of high volume server environments and cabling needs
- Types of cables: twisted pair, fiber optic, coaxial
- Connectors and termination methods
- Industry standards: TIA/EIA-568, SANS 10228-1
- Safety protocols and personal protective equipment (PPE)
- Introduction to cable management principles
- Documentation and labeling basics
- Environmental considerations: temperature, humidity, EMI

Day 2: Cabling Infrastructure and Pathway Planning

- Cable pathway types: overhead, underfloor, vertical
- Cable tray installation and support structures
- Conduit and raceway sizing
- Separation of power and data cables
- Firestop installation and regulations
- Cable length calculations and slack management
- Labeling and identification systems
- Documentation of pathway layouts

Day 3: Copper Cabling Installation and Termination

- Tools: crimpers, punch-down tools, cable testers
- Termination of RJ45 connectors and keystone jacks
- T568A and T568B wiring standards
- Cable testing: continuity, wiremap, length, attenuation
- Troubleshooting faults: opens, shorts, split pairs
- Best practices for cable bundling and dressing
- Quality assurance and certification
- Documentation of test results

Day 4: Fiber Optic Cabling Installation and Termination

- Fiber types: single-mode, multimode, and applications
- Connectors: LC, SC, ST, MTP/MPO
- Termination methods: epoxy/polish, prepolished/splice
- Mechanical and fusion splicing techniques
- Cleaning and inspection of fiber end faces
- Testing: optical loss test set (OLTS), OTDR
- Safety when working with fiber optics
- Documentation of fiber links

Day 5: Cable Management and Organization in High Density Environments

- Horizontal and vertical cable managers
- D-ring and ladder rack installation
- Bend radius control and strain relief
- Cable dressing and lacing techniques
- Managing patch cords and jumpers

- Color coding and labeling strategies
- Overhead vs. underfloor cable management
- Documentation and as-built drawings

Day 6: Testing, Certification, and Troubleshooting

- Certification testing: copper and fiber
- Understanding test parameters: NEXT, PSNEXT, ACR, return loss
- Using Fluke or equivalent testers
- Troubleshooting intermittent faults
- Identifying and fixing cross-connect issues
- Re-termination and re-testing procedures
- Generating test reports and documentation
- Best practices for maintaining certification records

Day 7: Practical Integration and Final Assessment

- Project planning and design review
- Installation of copper and fiber cabling
- Cable management and labeling
- Testing and certification
- Troubleshooting and remediation
- Final walkthrough and documentation
- Safety compliance check
- Assessment and feedback

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **10 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 21,700.00	R 21,700.00
1	In-House	R 28,200.00	R 28,200.00
1	On-Campus (Pretoria)	R 32,600.00	R 32,600.00

UPCOMING SESSIONS

Start	End	Method	Venue
21 Aug 2026	31 Aug 2026	On-Campus	Shenzhen, China
24 Aug 2026	01 Sep 2026	On-Campus	Bangkok, Thailand
25 Aug 2026	02 Sep 2026	On-Campus	Victoria Falls, Zimbabwe
25 Aug 2026	02 Sep 2026	On-Campus	Abu Dhabi, UAE
26 Aug 2026	03 Sep 2026	On-Campus	Durban, South Africa
27 Aug 2026	04 Sep 2026	On-Campus	Shenzhen, China
28 Aug 2026	07 Sep 2026	On-Campus	Harare, Zimbabwe
31 Aug 2026	08 Sep 2026	On-Campus	Victoria Falls, Zimbabwe

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 114057) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
2. **Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
3. **Apply by phone or WhatsApp:** call +27 12 004 8389 or WhatsApp +27 65 077 6310 and we will prepare your quotation and reserve your seats.
4. **Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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