

Sep 10, 2018

Dear KAPENA PETER LUMUMBA

I want to congratulate you on completing the Cisco® **CCNA Routing and Switching: Routing and Switching Essentials** course as part of the Cisco Networking Academy® program. This hands-on, lab-oriented course has prepared you for tremendous career opportunities.

You have achieved student level credential for completing **CCNA Routing and Switching: Routing and Switching Essentials**, and acquired the following capabilities:

- Determine how a router will forward traffic based on the contents of a routing table.
- Explain how switching operates in a small to medium-sized business network.
- Use monitoring tools and network management protocols to troubleshoot data networks.
- Configure monitoring tools available for small to medium-sized business networks.
- Configure initial settings on a network device.
- Configure Ethernet switch ports.
- Implement VLANs.
- Implement static routing and RIPv2.
- Implement DHCP on a router.
- Implement network address translation (NAT).
- Implement access control lists (ACLs) to filter traffic.

In today's world, technical literacy is more important than ever, and Cisco is proud to provide you with the knowledge and skills necessary to build and maintain digital networks.

Keep up the great work and best wishes for continued future success.

Sincerely,



Chuck Robbins  
Chairman and Chief Executive Officer  
Cisco



# CCNA Routing and Switching: Essentials

The student has successfully achieved student level credential for completing CCNA Routing and Switching: Routing and Switching Essentials course administered by the undersigned instructor. The student was able to proficiently:

- Determine how a router will forward traffic based on the contents of a routing table.
- Explain how switching operates in a small to medium-sized business network.
- Use monitoring tools and network management protocols to troubleshoot data networks.
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KAPENA PETER LUMUMBA

Student

CPUT Electrical Engineering Academy

Academy Name

South Africa

Location

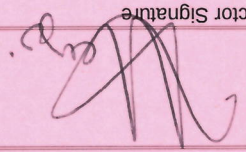
Vusumuzi Moyo

Instructor

Sep 10, 2018

Date

Instructor Signature





## CCNA Routing and Switching: Introduction to Networks

The student has successfully achieved student level credential for completing CCNA Routing and Switching: Introduction to Networks course administered by the undersigned instructor. The student was able to proficiently:

- Explain network technologies.
- Explain how devices access local and remote network resources.
- Describe router hardware.
- Explain how switching operates in a small to medium-sized business network.
- Design an IP addressing scheme to provide network connectivity for a small to medium- sized business network.
- Configure initial settings on a network device.
- Implement basic network connectivity between devices.
- Configure monitoring tools available for small to medium- sized business networks.

KAPENA PETER LUMUMBA

Student

CPUT Electrical Engineering Academy

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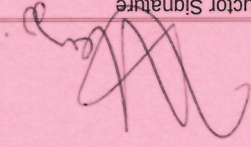
Vusumuzi Moyo

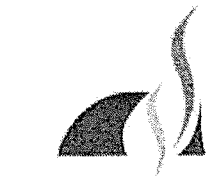
Instructor

Date

Sep 10, 2018

Instructor Signature





Cape Peninsula  
University of Technology

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## Department of Electrical Engineering

Enquiry: PR Tjale  
☎ (021) 959 5850  
tjalepr@cput.ac.za  
Bellville Campus

16 July 2018

### TO WHOM IT MAY CONCERN

This serves to confirm that **Mr. Kapena Peter Lumumba**, Student Number **217 016 375** is a bona fide student at the Cape Peninsula University of Technology (CPUT) in the **Electrical Engineering Department**. This letter further verifies that he has met the requirements to commence with **WORK INTEGRATED LEARNING**.

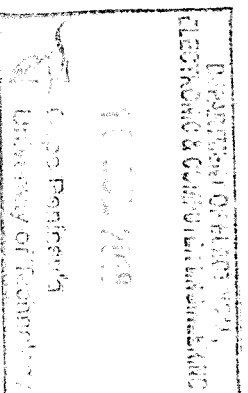
Before the National Diploma may be awarded to the student, he/she is required to undergo 12 months of relevant **WORK INTEGRATED LEARNING** in industry, in addition to 24 months of theoretical studies at CPUT. CPUT welcomes and appreciates any opportunity of **WORK INTEGRATED LEARNING** that an employer offers, in order that our students can realize their academic goals.

For any further information, please contact the writer using the contacts details above.

Yours sincerely

PR Tjale

WILL Coordinator



Bellville Campus, PO Box 1906, Bellville 7535

Cape Town, Granger Bay and Mowbray Campuses, PO Box 652, Cape Town 8000

Wellington Campus, Private Bag X8, Wellington 7654

Web site [www.cput.ac.za](http://www.cput.ac.za)



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