CCNA Routing and Switching: Introduction to Networks

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student was able to proficiently:

- Understand and describe the devices and services used to support communications in data networks and the Internet
- Understand and describe the role of protocol layers in data networks
- Understand and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments
- Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks

- Explain fundamental Ethernet concepts such as media, services, and operations
- Build a simple Ethernet network using routers and switches
- Use Cisco command-line interface (CLI) commands to perform basic router and switch configurations
- Utilize common network utilities to verify small network operations and analyze data traffic

Boitumelo Mosala

Student

Central University of Technology FS

Academy Name

South Africa

Location

20 Jul 2016

Date

Leon van der Linde

Instructor

Instructor Signature

Corporate
Social
Responsibility

CISCO ™

Certificate of Course Completion

Cisco Networking Academy

CCNA Routing and Switching: 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.
- 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.

Boitumelo Mosala

Student

Central University of Technology FS

Academy Name

South Africa

Location

6 Dec 2016

Date

Leon van der Linde

Instructor

Instructor Signature

CCNA Routing and Switching: Scaling Networks

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student was able to proficiently:

- Understand, configure, and troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel
- Understand, configure, and troubleshoot first hop redundancy protocols (HSRP) in a switched network

- Understand, configure, and troubleshoot wireless routers and wireless clients
- Configure and troubleshoot routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multiarea OSPF, and Enhanced Interior Gateway Routing Protocol (EIGRP)
- Manage Cisco IOS® Software licensing and configuration files

Boitumelo Mosala

Student

Central University of Technology FS

Academy Name

South Africa

Location

12 Jan 2018

Date

Leon van der Linde

Instructor

Instructor Signature

E10125359

DEPARTMENT: HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

CERTIFICATE OF ACHIEVEMENT
N2

ENGINEERING STUDIES

AWARDED TO

MOSALA BOITUMELO

IDENTITY NUMBER

9409020301085

WITH EFFECT FROM

2014-12-01

INSTRUCTIONAL OFFERINGS PASSED

* INDICATES DISTINCTION

INDUSTRIAL ELECTRONICS N2   *
ENGINEERING SCIENCE N2
ELECTRICAL TRADE THEORY N2
MATHEMATICS N2
* * * * * * * * * *

Examination Officer

Director-General

29738132T

SERIAL NUMBER   E 10125359

UMALUSI

Council for Quality Assurance in General and Further Education and Training

NATIONAL N3 CERTIFICATE

(ENGINEERING STUDIES)

NASIONALE N3 SERTIFIKAAT

(INGENIEURSTUDIES)

Awarded to/Toegeken aan

BOITUMELO MOSALA

Identity number	9409020301085	Identiteitsnommer

Subjects passed / Vakke geslaag

Industrial Electronics / Industriële Elektronika	N3	E	40%-49%	Aug 13
Engineering Science / Ingenieurswetenskap	N3	D	50%-59%	Nov 13
Mathematics / Wiskunde	N3	D	50%-59%	Nov 13
Electro-Technology / Elektrotegnologie	N3	D	50%-59%	Aug 13
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With effect from   December/Desember 2013   Met ingang van

Chief Executive Officer   M.S. Lakometsi   Hoof Uitvoerende Beampte

149 9695 8651 C

H10270735

DEPARTMENT: HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
CERTIFICATE OF ACHIEVEMENT
N4

ENGINEERING STUDIES

AWARDED TO

MOSALA BOITUMELO

IDENTITY NUMBER

9409020301085

WITH EFFECT FROM

2014-09-01

INSTRUCTIONAL OFFERINGS PASSED

* INDICATES DISTINCTION

ELECTROTECHNICS N4
INDUSTRIAL ELECTRONICS N4
ENGINEERING SCIENCE N4
MATHEMATICS N4
* * * * * * * * * *

Examination Officer

Director-General

QCTO
Quality Council for Trades & Occupations