## Course Aim

To provide students with skills in building LANs, VLANs and WANs using networking technology. Students will configure local networks and manage switches. LAN and VLAN building are achieved using the protocols VTP, STP, and RSTP. Students obtain skills in Wifi networks and access point configuration for Wifi networks. Students are introduced to WAN protocols and build a WLAN using PPP and Frame Relay.

## Short Title
Network 2

## Faculty
EDICT

## Credits
15

## Pre-requisites
IT6003 or ITB5003

## Co-requisites
None

## Anti-requisites
None

## Learning Outcomes

On successful completion of this course, students will be able to:

1. Describe the protocols that allow a VLAN to be implemented.
2. Implement and troubleshoot the VLAN Trunking Protocol (VTP), Inter-VLAN Routing and Spanning Tree Protocol (STP).
3. Describe the protocols that allow a WAN to be implemented.
4. Plan and configure LAN and WAN network connections and differentiate between WAN and LAN equipment and protocols.
5. Design a network security policy by using Access Control Lists (ACLs) and IP addressing services to implement this policy.

## Other directed hrs
Design a network security policy by using Access Control Lists (ACLs) and IP addressing services to implement this policy.

## Total learning hrs
150

## Level
7

## Effective From
February 2018

## Version
5

## Student Contact hrs
90

## Self-directed hrs
60

## Other directed hrs
0

## Theoretical Understanding

**NQF Sub-strand**

- Theoretical
- Practical
- Application of knowledge
- Theoretical Understanding
- Practical Application of knowledge
- Generic, Problem Solving and Analytical Skills