

# MTCNA

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|-------------------------------------|-------------------|
| <b>Course Name:</b>                 | MTCNA             |
| <b>Course Duration:</b>             | 40 hours          |
| <b>Requirements:</b>                | Network+          |
| <b>Who should take this Course:</b> | Network engineers |

## Syllabus Course

### Outline:

- MikroTik RouterOS Introduction
  - First time accessing the router + LAB
  - Setup Internet connection via router + LAB
  - TCP/IP Basics
  - Upgrade RouterOS + LAB;
  - Manage RouterOS logins + LAB
  - Manage RouterOS services
  - Backup and export/import configuration + LAB
  - RouterOS license
  - NTP client configuration
  - Netinstall + LAB
- MikroTik RouterOS Firewall
  - Firewall principles
  - Firewall Filter in action
  - RouterOS connection tracking
  - Basic Address-List + LAB
  - Source NAT
  - Destination NAT
  - NAT limitations

- MikroTik RouterOS QoS
  - Simple Queue + LAB
  - Traffic Prioritization + LAB
  - Simple Mangle and Tree Queue + LAB
  - PCQ setup + LAB
  - Bandwidth Test + LAB
  - Monitoring
- Mikrotik RouterOS Network Management
  - ARP + LAB
  - DHCP server and client + LAB
  - HotSpot + LAB
  - Proxy + LAB
  - Store
  - RouterOS tools
- MikroTik RouterOS Wireless
  - 802.11 a/b/g/n Concepts
  - Setup simple wireless link + LAB
  - MAC-address filtering + LAB
  - Wireless Security and Encryption + LAB
  - 802.11n specific settings + LAB
  - MikroTik wireless protocols + LAB
  - Monitoring Tools
- MikroTik RouterOS Bridging
  - Bridging concepts + LAB
  - Bridge wireless networks + LAB
  - Bridge Wireless and remote networks + LAB
- MikroTik RouterOS Routing
  - Routing overview
  - Static routing
  - OSPF + LAB
- MikroTik RouterOS Tunnels
  - Secure local network
  - PPP settings
  - IP pool
  - Secure remote networks communication + LAB