

Certified Routing Engineer (MTCRE)



OUTCOMES

By the end of this training session, the student will be able to plan, implement and debug routed MikroTik RouterOS network configurations

TARGET AUDIENCE

Network engineers and technicians wanting to deploy and support static and/or dynamic routed networks.

DURATION

2 days

COURSE PREREQUISITES

MTCNA certificate

CURRICULAR CONTENT



info@unireg.es

91 737 48 48

Paseo de la Castellana, 40
Planta 8

28046 Madrid

Module 1 Static Routing

- More specific routes
- ECMP
- How to force gateway over specific interface
- Gateway reachability check and route distance
- Routing mark and route policy
- Recursive next-hop and scope/target-scope usage
- Module 1 laboratory

Module 2 Point to Point Addressing

- Point to Point address configuration
- Module 2 laboratory

Module 3 VPN

- What is VPN?
- Different types of VPN
- Site to site connectivity with tunnels
- IPIP, EoIP, PPTP, SSTP, L2TP, PPPoE
- VLAN and it's usage
- QinQ implementation
- VLAN and managed switch
- VLAN and switch chip configuration on RouterBOARDS
- Module 3 laboratory

Module 4 OSPF

- What is OSPF?
- How OSPF protocol works
- Hello protocol
- Database distribution and LSA types explained
- OSPF network structure
- Areas
- Router types
- OSPF neighbors and neighbor states (DR and BDR election)
- External Route Distribution methods (type1, type2)
- Interface cost and interface types (broadcast, NBMA, etc.)
- SPT calculation algorithm
- OSPF and multicast (problems with NBMA)
- Stub, NSSA and area ranges (route aggregation)
- Virtual links, usage and limitations
- OSPF routing filters and limitations
- Module 4 laboratory