**PROGRAMMA Mikrotik MTCRE**

**16 ore**

## Module I: 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 II: Point to Point Addressing

- Point to Point address configuration
- Module 2 laboratory

## Module III: 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 IV: 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