## MTCRE training outline

## Course prerequisites – MTCNA certificate

Title	Objective
Static Routing	<ul> <li>More specific routes</li> <li>ECMP + LAB</li> <li>How to force gateway over specific interface</li> <li>Gateway reachability check and route distance + LAB</li> <li>Routing mark and route policy + LAB</li> <li>Recursive next-hop and scope/target-scope usage + LAB</li> </ul>
Point to point addressing	PtP address configuration + LAB
VPN	<ul> <li>What is VPN?</li> <li>Different types of VPN</li> <li>Site to site connectivity with tunnels (IPIP, EoIP, PPTP, SSTP, L2TP, PPPoE) + LAB</li> <li>Vlan and it's usage</li> <li>QinQ implementation + LAB</li> <li>Vlan and managed switch</li> <li>Vlan and switch chip configuration on Rbs + LAB</li> </ul>
OSPF	<ul> <li>What is OSPF?</li> <li>How OSPF protocol works (Hello protocol, Database distribution and LSA types explained)</li> <li>OSPF network structure (Areas, Router types)</li> <li>OSPF neighbors and neighbor states (DR and BDR election) + LAB</li> <li>External Route Distribution methods (type1, type2) + LAB</li> <li>Interface cost and interface types (broadcast, NBMA, etc.) + LAB</li> <li>SPT calculation algorithm</li> <li>OSPF and multicast (problems with NBMA)</li> <li>Stub, NSSA and area ranges (route aggregation) + LAB</li> <li>Virtual links, usage and limitations + LAB</li> <li>OSPF routing filters and limitations + LAB</li> </ul>