

## Course prerequisites – MTCNA and MTCRE certificates

Title	Objective
BGP	<ul style="list-style-type: none"> <li>• What is Autonomous System</li> <li>• What is BGP?</li> <li>• Path Vector algorithm</li> <li>• BGP Transport and packet types</li> <li>• iBGP and eBGP + <b>LAB</b></li> <li>• Stub network scenarios and private AS removal + <b>LAB</b></li> <li>• Non-stub scenarios + <b>LAB</b></li> <li>• iBGP and eBGP multihop and loopback usage + <b>LAB</b></li> <li>• Route distribution and routing filters +<b>LAB</b></li> <li>• BGP best path selection algorithm</li> <li>• BGP prefix attributes and their usage + <b>LAB</b></li> <li>• BGP route reflectors and confederations + <b>LAB</b></li> </ul>
MPLS	<ul style="list-style-type: none"> <li>• What is MPLS (basics)</li> <li>• Static Label Mapping + <b>LAB</b></li> <li>• Label Distribution (LDP) + <b>LAB</b></li> <li>• What is Penultimate-hop-popping</li> <li>• MPLS traceroute differences</li> <li>• LDP based VPLS tunnels + <b>LAB</b></li> <li>• What is Bridge Split Horizon + <b>LAB</b></li> <li>• VPLS Control Word (CW) usage</li> <li>• L2MTU importance and MPLS fragmentation</li> <li>• BGP based VPLS + <b>LAB</b></li> <li>• VRF and route leaking + <b>LAB</b></li> <li>• L3VPN (BGP based Layer3 tunnels) + <b>LAB</b></li> <li>• OSPF as CE-PE protocol</li> </ul>
Traffic Engineering	<ul style="list-style-type: none"> <li>• What is traffic engineering and how it works</li> <li>• RSVP, Static path, dynamic path (CSPF) + <b>LAB</b></li> <li>• Bandwidth allocation and bandwidth limitation differences and settings + <b>LAB</b></li> </ul>