| **DAY 1** | | |
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| **เวลา** | **เนื้อหา** | **หมายเหตุ** |
| 09.00 – 10.30 น. | **The Internet Protocol**   * IPv6 Technical Features * Differences between IPv4 and IPv6 * IPv6 Address Architecture and Scheme * Notation of IPv6 addresses * Types of addresses * IPv6 Addressing Schemes * IPv6 Address Allocation (Follow by RFC) * Sample Address allocation * Address configuration * Stateless autoconfiguration / RA * Stateful autoconfiguration / DHCPv6 * Duplicate address detection |  |
| 10.30 – 10.45 น. | ---------- Break ---------- |  |
| 10.45 – 12.00 น. | **ICMPv6**   * Path MTU Discovery * Multicast Listener Discovery * Neighbour discovery procedures, SEND * Router redirection |  |
| 12.00 – 13.00 น. | ---------- Lunch ---------- |  |
| 13.00 – 14.30 น. | **Client configuration (Practical training)**   * OS client Configuration Set up IPv6 clients Windows, Mac, Linux * Address auto-configuration for client Ping6, IP config, routing, traceroute, IPv6 testing tools * Understand IPv6 packet contents  Wireshark, (see all traffic patterns) (เน้นดูแบบ Local) * Understand duplicate address detection * Understand router advertisement |  |
| 14.30 – 14.45 น. | ---------- Break ---------- |  |
| 14.45 – 16.30 น. | **Name Service in IPv6**   * IPv6 and DNS * AAAA * Reverse lookup in IPv6.ARPA * DNS Setup (Preinstalled Linux/VM, VirtualBox)   **Practical work**  Setup Bind, Add/remove IPv6 records, zone transfer |  |

| **DAY 2** | | |
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| เวลา | เนื้อหา | หมายเหตุ |
| 09.00 – 10.30 น. | **Set up IPv6 servers and firewall ( Practical work )**   * Web server (Apache) * Mail server (sendmail) * Firewall (iptables) |  |
| 10.30 – 10.45 น. | ---------- Break ---------- |  |
| 10.45 – 12.00 น. | **IPv6 Integration and migration**   * IPv4/IPv6 migration and transition techniques * Dual stacks * Encapsulation/Tunnelling (e.g., 6-to-4, 6-in-4, 6-r-d, Isatap, Teredo) * Translation (e.g. CGN, NAT44, NAT444, AF |  |
| 12.00 – 13.00 น. | ---------- Lunch ---------- |  |
| 13.00 – 14.30 น. | * IPv4/IPv6 migration and transition techniques (Cont.) |  |
| 14.30 – 14.45 น. | ---------- Break ---------- |  |
| 14.45 – 16.30 น. | **Practical work (Cont.)**   * Tunnel Broker |  |

| **DAY 3** | | |
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| **เวลา** | **เนื้อหา** | **หมายเหตุ** |
| 09.00 – 10.30 น. | **Routing protocols**   * Static, Dynamic routing and its advantages over the static routing * RIPng * OSPF for IPv6 * BGP4+ |  |
| 10.30 – 10.45 น. | ---------- Break ---------- |  |
| 10.45 – 12.00 น. | **Practical work**   * Static * OSPF |  |
| 12.00 – 13.00 น. | ---------- Lunch ---------- |  |
| 13.00 – 14.30 น. | **Practical work** (Cont.) |  |
| 14.30 – 14.45 น. | ---------- Break ---------- |  |
| 14.45 – 16.30 น. | **Practical work** (Cont.) |  |