<table>
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<tr>
<th>Course code</th>
<th>Course Name</th>
<th>L-T-P- Credits</th>
<th>Year of Introduction</th>
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<tr>
<td>IT334</td>
<td>Computer Networks Lab</td>
<td>0-0-3-1</td>
<td>2016</td>
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**Prerequisite** : IT307 Computer networks

**Course Objectives**
- To implement important computer networking protocols.
- To manage Layer2 switching service.
- To configure Virtual LANs and access control list.
- To troubleshoot an internetwork.

**List of Exercises / Experiments** (Minimum of 9 mandatory out of 11)

**INTERNETWORKING BASICS**

**IP ROUTING**
2. Implementing static routing.
3. Implementing dynamic routing using RIP.
4. Implementing dynamic routing using OSPF.
5. Implementing dynamic routing using EIGRP.

**VIRTUAL LANS**
7. VTP Configuration, VTP pruning.
8. Implement inter-VLAN routing.

**SECURITY**
9. Access Control List
   b. Extended Access Lists.

**MANAGING A INTERNETWORK**
10. Backup and restoring IOS.
11. Familiarization of network simulators.

**Class Project** (Minimum one mandatory per group)
   i. Implementation of an organizations network with security using any routing protocols.
   ii. Implementation of network using VLAN and configure inter-vlan communication

**Expected Outcome**
The students will be able to
   i. configure a network using routing protocols and VLAN
   ii. manage a internetwork

**References**