# E2MATRIX

# Training and Research Institute

**www.e2matrix.com**

# NS2 COURSE STRUCTURE

The network simulator is discrete event packet level simulator. The network simulator covers a very large number of application of different kind of protocols of different network types consisting of different network elements and traffic models. Network simulator is a package of tools that simulates behavior of networks such as creating network topologies, log events that happen under any load, analyze the events and understand the network. Well the main aim of our first experiment is to learn how to use network simulator and to get acquainted with the simulated objects and understand the operations of network simulation and we also need to analyze the behavior of the simulation object using network simulation.

## Module 1

1. OSI Architecture
2. NS2 Architecture
3. TCL scripting
4. Energy Model Construction
5. Set dest File creation method
6. Agent and Application creation method

7. VANET mobi Sim Construction

**Module 2**

1. Perl and AWK scripting
2. X-graph and Gnuplot Generation
3. Malicious Node Construction
4. Security Model
5. Threshold Model

**Module 3**

1. New Network layer protocol creation
2. New application layer protocol creation
3. New agent creation

**Module 4**

1. Construction of DDOS attacks in the network
2. Construction of security methodologies

**Module 5**

1. Construction of Multi-channeling
2. Construction of opportunity network