# FACULTY OF ENGINEERING & TECHNOLOGY

**Brajesh Mishra**

Assistant Professor
Department of Computer Science & Engineering

Routing
Need for Routing
Routing Classification

# Routing

Routing is the process of finding the best path for traffic in a network, or across multiple networks. The role of routing is similar to the road map for a hotel. In both cases, we need to deliver messages at proper location and in an appropriate way. Routing in a mobile ad-hoc network depends on many factors such as:

Modeling of the topology,

Selection of routers,

Initiation of a route request,

And specific underlying characteristics that could serve as heuristics in finding the path effectively.

There are following needs for routing:

Since centralized routing in a dynamic and even for small networks is impossible therefore routing computation must be distributed.

Route computation should not add many more nodes.

If any host demands for the route, they must have quick access.

Maintenance of a global state should not involve in the route computation.

Each node should care about their destination node to its route and should not be involved in frequent topology updates for those portions of the network that have no traffic.

Since broadcast can be time consuming for MANETs, it must be avoided as much as possible.

In routing there must have a backup route when the primary route has become stale.

Routing protocol can be classified as:
Proactive Protocol
Reactive Protocol
Hybrid Protocol