

# ALLOCATION OF BSc. PROJECT

## DESIGN AND IMPLEMENTATION OF INTELLIGENT WSN ARCHITECTURE FOR SMART CITIES

### PROJECT DATA:

**Branch:** ..... Electrical Engineering .....

**Department:** ..... Communications .....

**Field of Research:**    **Wireless Sensor Networks (WSN)**

### Abstract:

Design and implementation of intelligent WSN for smart cities to monitor the transportation. We study the wireless sensor network and its applications such as smart cities and monitoring transportation. We choose tracking wireless sensors to be employed in the network. First, we develop WSN with base station and tracking sensors. Second, the targets are detected by the sensors and any target is reported with its location to the base station. Third, the network gives information to cars on the road to prevent accidents due to speed and this is our task to fully study target tracking sensors for monitoring transportation.

### Description of the Task:

- Simulation of target tracking WSN
- GUI for target tracking WSN on the computer
- Design and Implementation of Secure target tracking WSN for monitoring transportation

### Experimental and Computer Work:

- Simulation of Secure target tracking WSN using MATLAB
- Programming the sensor mote
- Design and Implementation of target tracking WSN for monitoring transportation

### Time Table:

No.	Date	Task	Evaluation	Notes
1	24/9/2011	Understanding the objectives of the project		
2	29/10/2011	Simulation of target tracking WSN		
3	28/1/2012	Implementation of target tracking WSN		
4	25/2/2012	Building the GUI of target tracking WSN		
5	31/3/2012	Implementation of target tracking WSN		
6	9/6/2012	Submission of the project		

### Supervisors:

No.	Rank	Name
1	Assoc. Prof.	KHALED HUSSEIN MOUSTAFA
2	Eng.	MOHAMED HELMY MEGAHED