

CNT 6528 Vehicular Networks

Credits: 3 credits

Text book, title, author, and year: *No text is required and the following can be used as a reference book: Vehicular Networks from Theory to Practice*, Olariu, Stephan (Editor) and Weigle, Michele C. (Editor), Chapman & Hall/CRC Press 2008, ISBN: 1420085883

Reference materials: N/A

Specific course information

Catalog description: A study of vehicular networks routing and MAC protocols, broadcast protocols, applications, and performance modeling

Prerequisites: CNT 4104 Introduction to Data Communications or an equivalent networking course
Corequisites: N/A

Specific goals for the course: To develop an understanding of the basic concepts of vehicular networks and their communications protocols and to examine the technical challenges encountered in the deployment of these networks.

Brief list of topics to be covered:

Lecture Topics

1. Introduction
2. WAVE Standard
3. Vehicle Localization
4. Routing protocols
5. Broadcast protocols
6. Geo-cast protocols
7. Aggregation
8. MAC protocols
9. Scalability issues
10. Privacy and security
11. Performance modeling
12. Applications