

CNT 6517 Mobile Computing

Credits: 3 credits

Text book, title, author, and year: *Mobile Computing Handbook*, Eds. M. Ilyas and I. Mahgoub, CRC Press 2005, plus instructor's notes, and selected articles and papers

Reference materials:

Ad Hoc Networking, Charles Perkins, Addison Wesley, 2001.

Smart Dust: Sensor Network Applications, Architecture, and Design, Imad Mahgoub and Mohammad Ilyas, CRC Press, 2006.

Specific course information

Catalog description: A study of the main issues in mobile computing and the approaches that address them.

Prerequisites: Basic knowledge of computer architecture and data communications and networking

Specific goals for the course: The course offers detailed discussion of the important and challenging issues in mobile computing and examines the different approaches that address these issues.

Brief list of topics to be covered: Introduction to mobile computing

1. Location management
2. Caching strategies
3. Mobile ad hoc and wireless sensor networks
4. Power consumption issues
5. Security issues
6. Applications