

# **CEN-6502 Concurrent & Distributed Systems**

## **Catalog Description**

Study of the major aspects of concurrent and distributed systems. Topics include foundations of concurrent computation, languages and tools for concurrent systems, distributed real-time systems, distributed multimedia systems, and concurrent object-oriented systems. (3 credits)

## **Prerequisites**

COP 5611

## **Type**

Elective graduate courses

## **Course Objectives**

This is an advanced research seminar course, which will be taught differently from basic courses. The objective is to provide students with both basic and advanced knowledge in the areas of concurrent & distributed systems and broad research skills to start their research career, which include, for example, basic research methodologies, how to search research publications, how to read/critique papers, how to develop and formulate research ideas, how to carry the ideas through toward publishable results, how to write research papers, how to conduct effective technical presentations, and so on.

## **Topics**

- Distributed algorithms
- Inter-process communication
- Models of distributed computing
- Distributed middleware and component technologies
- Internet-based computing
- Web services
- Security for distributed systems
- Wireless communication and computing
- Distributed multimedia communication and systems

## **Textbook**

Handouts will be provided

## **Last Update**

Shu-Ching Chen 10/30/2012