Certificate Program
In
Networking and Wireless Communications

Dept. of Electrical & Computer Engineering,
Stony Brook University

Networking & Wireless Today

Networking and wireless communications are key technologies in today's technological world. Networks such as the Internet as well as telephone, cable and wireless networks serve to interconnect people and computers in a ubiquitous and cost effective way. The area of wireless communications in particular has grown rapidly in recent years and has utilized networking technology to be successful. There is a large industrial base involving networking and wireless communications in terms of equipment and software providers, service providers and end users. Moreover this technology has made the average consumer's life more productive, flexible and enjoyable.

The Stony Brook Certificate Program

The Stony Brook Certificate Program in Networking and Wireless Communications is designed to give students and engineers validated graduate level instruction in this area of much recent interest. The program can be completed in a reasonable amount of time as it involves only four courses. These are regular Stony Brook graduate level courses taught by Stony Brook faculty. The certificate program can be tailored to the needs of the individual student. Courses used for the certificate program can also be used towards the masters degree in electrical engineering by matriculated students.

Courses are offered on the Stony Brook University campus and can also be offered on company sites (if a minimum number of students is guaranteed). For further information on the certificate program contact Prof. Thomas Robertazzi at 631-632-8412 or –8400 (messages) or at tom@ece.sunysb.edu

Certificate Requirements

To receive the Stony Brook certificate in networking and wireless communications, a student must complete four courses with at least a B average (3.0 GPA):

At least one course must be:

- ESE 505: Wireless Communications
- ESE 506: Wireless Networking and Mobile Computing

At least one course must be:

- ESE 532: Theory of Digital Communications
- ESE 546: Computer Communication Networks
- ESE 548: Local and Wide Area Networks

In addition to the above requirements, if needed, courses may be selected from:

- ESE 503: Stochastic Systems
- ESE 504: Performance Evaluation of Communication and Computer Systems
- ESE 522: Fiber Optic Systems
- ESE 528: Communication Systems
- ESE 531: Detection and Estimation Theory
- ESE 535: Information Theory and Reliable Communication
- ESE 536: Switching and Routing in Parallel and Distributed Systems
- ESE 547: Digital Signal Processing
- ESE 550: Network Management and Planning
- ESE 552: Interconnection Networks