GRADUATE CERTIFICATE IN COMPUTER ENGINEERING

Computer engineering is a rapidly growing profession and computer engineers are in the midst of exciting times with unlimited opportunities in all walks of life. For instance, computer engineers interact with and design large supercomputers as well as the ubiquitous personal and portable computers. Furthermore, computer engineers play a key role in networking computers with other computers and intelligent devices. Computer engineers are also involved in such varied projects as designing specialized computer hardware to reconstruct the human genome; monitoring and controlling industrial plants and the environment, computer graphics and robotics; and designing biomedical devices and computer networks. Finally, computer engineers design and develop hardware and embedded hardware-software systems. The graduate certificate in computer engineering is designed for working professionals who seek to acquire an in-depth understanding of the field. The program consists of three required courses and one elective course. A GPA of 3.0 or higher is required in the four courses to receive the certificate.

Required Courses: (choose 3)

Course No. /Title	**Credits**
EL 5493 Advanced Hardware Design (VHDL)	3
EL 5363 Principles of Communication Networks	3
EL 5473 Introduction to VLSI design	3
CS 6133 Computer Architecture I	3

Recommended Elective Courses (choose 1):

Course No./Title	**Credits**
EL 5483 Real-Time Embedded Systems	3
EL 6493 Digital VLSI System Testing	3
EL 6443 VLSI System Architectures	3
EL 6453 VHDL-Based Behavioral Synthesis	3
EL 6413 Analog & High Frequency Amplifier Design	3
EL 6433 Digital Integrated Circuit Design	3
CS 6143 Computer Architecture II	3
CS 6183 Fault-Tolerant Computers	3
Unchosen one from Group 1	3

Certificate Coordinator:
For further information regarding the Computer Engineering Certificate, contact Professor Ramesh Karri at 718-260-3596 or send e-mail to rkarri@poly.edu.