



CNIT Becomes Microsoft IT Academy

The Computer Networking and Information Technology (CNIT) Department at City College of San Francisco is becoming a Microsoft IT Academy!

CNIT has provided classes leading to Microsoft certification since its inception. Becoming a Microsoft IT Academy motivates the CNIT to more precisely and quickly align with the official Microsoft curriculum. Private training centers frequently charge thousands of dollars for Microsoft training which CNIT offers at an affordable \$26 per unit (becoming \$20/credit in 2007!).

continued on page 2

Curriculum Revision Progress

With valuable input from ICONS' Advisory Panel members, ICONS has initiated a comprehensive curriculum review and design exercise to develop course, certificate and degree plans for both ICONS and the Computer Networking and Information Technology Department (CNIT).

continued on page 4

CNIT Becomes Pearson VUE Authorized Center (PVAC) for Testing

The Computer Networking and Information Technology (CNIT) Department at City College of San Francisco is becoming a Pearson VUE Authorized Center for Testing!

Pearson VUE is an electronic testing business which provides a variety of testing related services for the Health & Medicine, Information Technology, Driving License, Academic/Admissions, Employment & Human Resources and Financial Services industries.

Pearson VUE operates a network of more than 4,000 PVACs in 145 countries and over 230 company-owned and -operated testing centers, called Pearson Professional Centers.

continued on page 3

ICONS Conducts '06 Summer Convergence Workshops

Increasingly, enterprise networks and support staffs are converging. Previously separate telecommunications, network and IT systems, applications and functions are now frequently operated on shared communications infrastructure, utilizing fiber optics, high-speed LANs, high-speed computing devices and common IP network technologies.

This summer, during June and July, ICONS conducted a Communications Convergence Workshop at the CCSF Ocean campus, which showcased convergence technologies, including Fiber Optics, Voice over IP, Juniper Routing & Security, Metro/Wide Area Ethernet, Video Networking and WiFi Networking.

continued on page 2

INSIDE THIS ISSUE

- 1 CNIT Becomes Microsoft IT Academy
- 1 Curriculum Revision Progress
- 1 CNIT Becomes Pearson VUE Authorized Center (PVAC) for Testing
- 1 ICONS Conducts '06 Summer Convergence Workshops
- 4 Alcatel Press Release Features CCSF/ICONS

Microsoft | IT Academy Program

According to Microsoft, “more than just training, the Microsoft IT Academy Program is a global IT learning solution that connects educators, students, and community.

“From the earliest IT instruction in classroom environments to ongoing resources for supporting professional careers, the program is designed to be a model for continuous learning and is based on a three-point strategy:



IT Instruction focuses on providing a world-class Microsoft training curriculum supported by a wealth of online resources and an immersive teaching and learning experience for both educators and students.

IT Validation assesses and certifies performance at many levels, and provides more affordable certification. Full certification provides competency benchmarks that validate students’ skills to prospective employers.

IT Immersion surrounds students with real-world challenges, experiences, and insight to help them prepare for and enter the workforce thus meeting the needs of employers and the professional IT community.”

Microsoft IT Academy objectives include: offering a world-class Microsoft curriculum to educate students about critical IT skills; providing rich online learning resources; creating lifelong learning resources for continuing education and faculty development; linking academic learning to real-world job skills to help students graduate with IT skills they need to succeed on the job; creating a skilled workforce for employers; and connecting students and teachers to Microsoft.

Program benefits include: access to E-Learning resources, online faculty training, favorable pricing for Official Microsoft Learning Products and Courseware, access to Microsoft Speaker’s Bureau presentation resources, Microsoft software licenses, access to student internship and job placement resources, student and faculty resume resources, faculty and student mentorship programs, access to special training events and marketing materials.

As a Pearson VUE Test Center, CNIT will be able to administer Microsoft certification tests to CNIT students in CNIT classrooms.

More information on Microsoft IT Academy Program can be found at www.microsoft.com/education/msitacademy.



Fiber Optics – covered fiber optic technology fundamentals, impacts on communications technology industries, implications for enterprises and practical applications. Hands-on labs included opportunities to try fusion splicing and test CCSF’s 30 mile optical network with OTDR devices.

Voice over IP (VoIP) – covered basic IP telephony and its implications to the telecom industry and to enterprises. Hands-on labs included opportunities with Cisco Call Manager and CCSF’s Alcatel OmniPCX platform.



Juniper Routing and Security – showcased modern Internet technologies, operations and realities with valuable insights from a leader in Service Provider IP networking, Juniper Networks.

Metro/Wide-Area Ethernet – Metro Ethernet Forum (MEF) demonstrated how Ethernet has evolved beyond the LAN to become metro, national and global carrier services and powerful enterprise tools. Beyond its campus LANs, CCSF uses gigabit Ethernet to connect its campuses in a metro area network and to connect with the Internet and Internet2.



Video Networking – covered IPTV and digital video, compression and streaming technologies and video content storage and retrieval systems. Hands-on demonstrations included a state-of-the-art clientless system from VideoFurnace.

WiFi Networking – included insights into the rapid expansion of this local access technology’s expansion to metro-wide service implantations and hands-on opportunities with Cisco Network Academy equipment.



“CNIT 80x, was a great workshop. As someone who works in IT, it is often difficult to actually get information on emerging technology... especially while trying to maintain current technology. The class not only touched on emerging technology but allowed me to experience it first hand with labs; I had the opportunity to splice fiber optic cables for the first time, configure a VOIP phone, and configure a wireless network... While I had not planned on taking a summer class, I am certainly glad that I did. The 6 weeks of class was certainly worth the time and effort! I learned quite a bit and had fun doing so. As a result, I am re-thinking about adding IT another class this fall.” (Student Comment)

At this time, the CNIT department at City College of San Francisco intends to offer networking and IT tests at City College which are relevant to CNIT students taking CNIT courses. Currently, those include Cisco Systems exams for students in Cisco Networking Academy courses, Microsoft tests for students taking courses in the newly formed Microsoft IT Academy Program, and CompTIA exams for students seeking industry certificates.

Tests of immediate interest to CNIT students include:

CompTIA A+	CompTIA Network+
CompTIA Security+	CompTIA Linux+
Cisco CCIE	Cisco CCNA
Cisco VoIP	Cisco PIX
Cisco WLAN	Microsoft MCP
Microsoft MCSA	Microsoft MCSE
Microsoft MCDST	

Pearson VUE offers testing services for a wide variety of industry IT and networking tests. In addition to Cisco, Microsoft and CompTIA, tests are available for: Adobe, Agilent, Altiris, Avaya, BMC Software, Brocade, Business Objects, CIW, CommVault, C-STAR, CWNP, Dassault Systemès/CATIA, EC-Council, EXIN, HDI, IBM/Lotus/Tivoli, Linux Professional Institute (LPI), Macromedia, MatrixOne, McDATA, MySQL, National Instruments (NI), Novell, Pegasystems, Radware, RSA Security, SAP, Siemens, SITA, Sun Microsystems, Telecommunications Industry Association (TIA), UMTF, VERITAS, VMware and Zend Technologies. Over time, as the CNIT department and ICONS revise and add courses and certificates, CNIT would be able to offer its students additional relevant testing services.



For now, the CNIT Department and ICONS are very excited about being able to offer Pearson VUE testing services at City College of San Francisco. Students will be able to take certification tests in the same classrooms where they learn about the relevant technologies. That increases the probability of students actually taking the tests and receiving industry certifications valuable in their careers.

Tests are administered through a tamper-proof electronic testing system. More information may be obtained at www.pearsonvue.com.

services to our staff and faculty, and help position our school for a tremendous grant that is helping to further advance technology studies in our academic programs, in addition to our network needs," said Tim Ryan, Network manager at CCSF. "The NSF grant allows us to use our technology infrastructure for academic purposes, ultimately expanding job-training opportunities in the emerging digital media and communications convergence industries. CCSF sees Alcatel as an ongoing partner and an industry leader in emerging technology, which enable our efforts to make that happen and develop new curriculum related to communications convergence."

"Alcatel considers CCSF to be a key end customer and we look forward to a continued long term successful relationship as the college evolves and incorporates new technology to continue offering a state-of-the-art network," commented David Dwyer, General manager of Alcatel's North America Enterprise Voice activities.

About City College of San Francisco

With more than 106,000 students, over 3,000 full and part-time staff and faculty, more than 4,700 courses delivered in more than 50 academic programs and more than 100 academic disciplines, City College of San Francisco is one of the largest colleges in the world. ICONS is funded by a USD 750,000, 3-year grant from the National Science Foundation as an Advanced Technological Education (ATE) Project under the Computer Networking and Information Technology (CNIT) Department at CCSF. The CNIT department was created in 2002 to provide instruction in rapidly advancing technologies for creating, processing, managing and communicating information. CNIT trains technicians to implement and operate 21st century enterprise and service provider information and networking systems. <http://www.ccsf.edu>

About Alcatel

Alcatel provides communications solutions to telecommunication carriers, Internet service providers and enterprises for delivery of voice, data and video applications to their customers or employees. Alcatel brings its leading position in fixed and mobile broadband networks, applications and services, to help its partners and customers build a user-centric broadband world. With sales of EURO 13.1 billion and 58,000 employees in 2005, Alcatel operates in more than 130 countries. For more information, visit Alcatel on the Internet: <http://www.alcatel.com>

CCSF and Alcatel are currently collaborating with ICONS Advisory Panel member Telekenex to beta test a joint SIP Voice Trunking solution, which we look forward to reporting on in a future edition of this newsletter.

With the Advisory Panel and with Faculty and Staff, we completed a job skills mapping exercise to develop consensus on the skills desired for convergence (ICT) and CNIT graduates. We also began working as a faculty team to compare the outcomes from our current courses to these skills to determine gaps and modifications needed in our courses and eventually in our programs. We will complete this comparison this fall. The result will be courses and certificates that can be used "as is", those to be modified, and those that are totally new to our curriculum.

Great progress is being made, including teaching ICONS Fiber Optic and VoIP courses again this Fall, the addition of Juniper Networks and "Ethical Hacking" courses for next spring, becoming a Microsoft IT Academy, becoming a Pearson VUE Authorized Test Center, consolidating the wireless curriculum to 3 courses, including a new Cisco wireless course, and processing AS degree applications this Fall.

We look forward to comprehensive reporting on outcomes of this exercise as it matures!

ICONS CALENDAR

Date	Event
10/12/06	ICONS hosts initial meeting to form IEEE Student Chapter at City College of San Francisco
10/18-20/06	NSF ATE National Conference; Washington, DC
10/19/06	Society of Telecommunications Consultants (STC) Conference Presentation - CCSF Technology Transformations & ICONS; San Francisco, CA
10/22-25/06	League of Innovations Conference on Information Technology (CIT) Conference; Charlotte, NC
11/27-12/1/06	ICONS is patron and presenter at IEEE Globecom Conference; San Francisco, CA
1/12-13/07	ICONS Hosts National Center for Telecommunications Technology (NCTT) Winter 2007 Conference; San Francisco, CA

Alcatel Press Release Features CCSF/ICONS

ICONS' Advisory Panel member and CCSF vendor Alcatel released the following press release regarding City College of San Francisco and ICONS this month:



City College of San Francisco Selects Alcatel to Develop Technical Foundation for Institutional and Academic Advancement

Monday September 11, 10:53 am ET

Alcatel Expertise Helps to Secure USD 750,000 National Science Foundation Grant

DALLAS, Sept. 11 /PRNewswire-FirstCall/ -- Alcatel (NYSE: [ALA](#) - [News](#); Paris: [CGEP.PA](#) - [News](#)) today announced that City College of San Francisco (CCSF) has deployed an advanced Voice over IP (VoIP) networking solution using Alcatel's OmniPCX Enterprise communications server. The Alcatel solution, along with a 30 mile optical fiber ring and a grant from the National Science Foundation, are part of CCSF's efforts to advance institutional and academic accomplishment utilizing 21st century communications technology.

CCSF's network utilizes approximately 2,000 Alcatel handsets in facilities dispersed throughout San Francisco. Internal calls are routed over a private data network, utilizing a 30-mile optical fiber ring connecting nine major campuses. Using taxpayer approved bond funds to purchase the fiber network and Alcatel solution, CCSF is realizing operational cost savings of more than USD 400,000 per year. The fiber and VoIP network solutions have further played key roles in CCSF's receipt of a USD 750,000 National Science Foundation grant to establish ICONS (Institute for Convergence of Optical and Network Systems). ICONS develops and delivers advanced technology training, using the OmniPCX Enterprise Communications Server and fiber networks as real- world instructional environments for students. Alcatel serves on the ICONS' Advisory Panel.

"Alcatel's VoIP technology has enabled us to see measurable monthly cost savings, deliver enhanced communication

continued on page 3