Impact Profile

Texas

ICT and Networking Courses Prepare and Inspire Future Innovators

Today, 2 billion things are connected over the Internet. Experts say that by 2020 more than 37 billion organic and inorganic connections will be made. This rapid increase is called the Internet of Everything, which demands a technology-adept workforce across all fields and disciplines.

Cisco Networking Academy provides information and communication technology (ICT) and networking courses to high schools, community colleges and universities globally. Students learn how to design, build and secure intelligent networks, while developing soft skills like leadership, collaboration and entrepreneurship. Classroom instruction, online learning, interactive games, simulations, and hands-on practice are continuously refreshed and aligned with U.S. STEM and education standards.

More than 1 million students are enrolled in Networking Academy courses around the world, preparing to become the innovators of tomorrow.

The Impact in Texas

11,538
Students taught in 2013-2014

102,581
Students since inception

251
Instructors preparing the ICT workforce

115
Organizations offering Cisco ICT courses

45.35 Million
Estimated in-kind contribution to education

you + networks = impact

Innovative Technology Education for All Education Levels

Cisco Networking Academy offers a comprehensive teaching and learning program licensed free to not-for-profit organizations, including course content, lab exercises, simulation software, gaming, interactive teaching guides, assessments, and grade books. All teaching materials are available online with 24-hour support.

Cisco Networking Academy courses are designed for secondary, post-secondary, and professional development education programs. For secondary programs, courses are aligned chapter by chapter with STEM cluster topics, Common Core State Standards for technical subjects, and Next Generation Science Standards (NGSS).

ICT and Networking Courses Engage Students

Students acquire the basic-to-advanced ICT and networking expertise needed by every business, school, hospital, nonprofit, and other organization that relies on intelligent networks to keep them running and secure.

Courses include IT Essentials, Linux Essentials, Cisco CCNA® Routing and Switching, CCNA Security, and Cisco CCNP®. Supplemental courses cover voice, cloud, healthcare IT, and more.

The hands-on instructional approach using real-world scenarios encourages student engagement, and increases their ability to synthesize what they learn for application in other contexts.

Students strengthen their understanding of technology, math, science, and engineering concepts, which improves their success in advanced studies and prepares them for globally-recognized certification exams.

21st Century Career-Ready Skills

Courses integrate skill areas identified as critical for 21st century professionals:

- **Problem solving and decision making:** Students configure and troubleshoot networks based on real-world scenarios.
- **Creative and critical thinking:** Students synthesize what they learn and apply it in other contexts.
- **Collaboration, communication, and negotiation**: Students acquire teamwork and leadership skills through group projects.
- **Intellectual curiosity and information handling:** Students develop the ability to evaluate, structure, and present information clearly.

Courses prepare students to reach their full potential in new or existing careers, or to establish their own businesses.

Professional and Community Development

Unique to the program are support communities for both instructors and students. Instructors receive training prior to teaching their first class, and ongoing professional development opportunities. Cisco hosts peer communities that enable instructors to collaborate and share best practices in person and online. Students take part in skills competitions, and access a global network of peer mentorship for coursework and exam preparation.
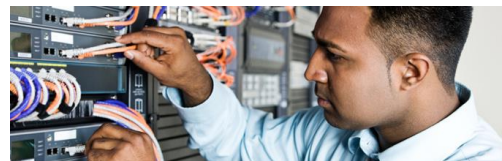

"What the [technology] workforce needs now are those who can present what they are doing to people who are **not** in IT. Along with tech skills, they certainly need business skills as well."

– Networking Academy graduate

"Black Box Network Services partners with academy schools to provide students with internships, job shadowing, and job offers. Cisco does an exceptional job preparing students to excel in today's business environment. Our academy hires have added immediate impact to our clients' initiatives, and continue to excel by achieving advanced certifications."
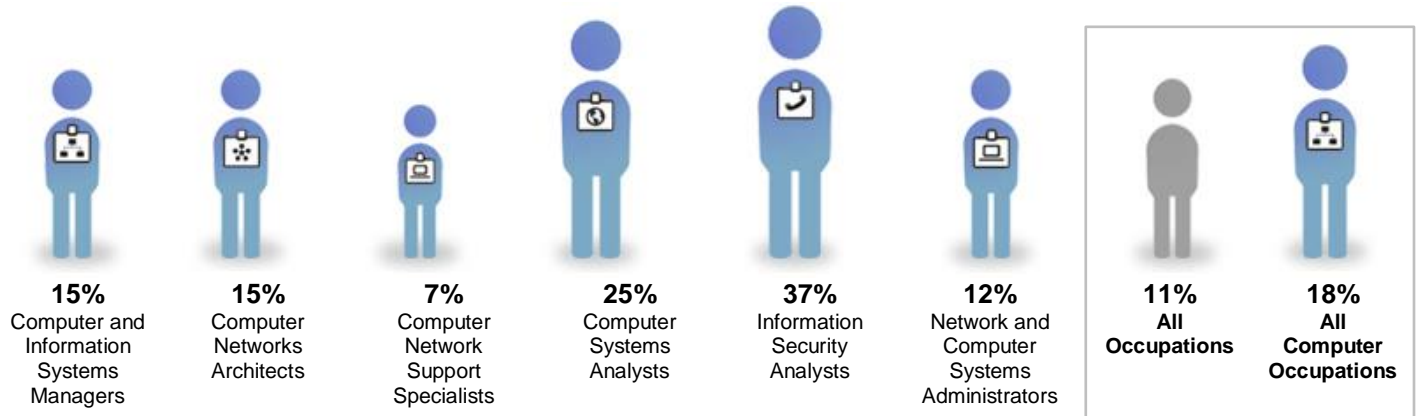
–Talent Acquisition Manager

High Demand for ICT and Networking Skills

Networking is expected to be the second fastest growing ICT specialization in the United States and Canada.
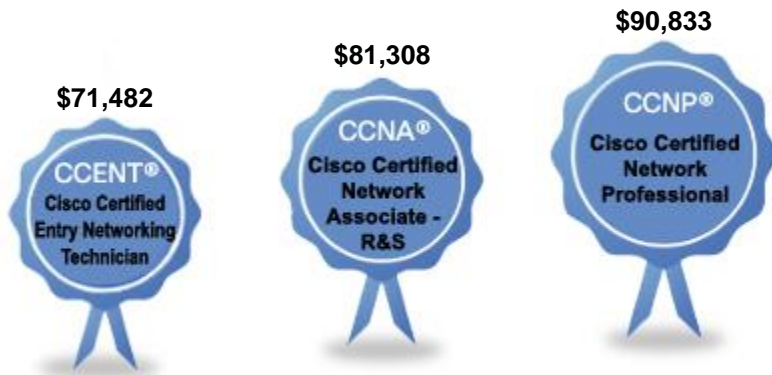
2022 U.S. Employment Growth Projections[1]

15% Computer and Information Systems Managers	**15%** Computer Networks Architects	**7%** Computer Network Support Specialists	**25%** Computer Systems Analysts	**37%** Information Security Analysts	**12%** Network and Computer Systems Administrators	**11%** All Occupations	**18%** All Computer Occupations

Texas Employment Growth Projections (2012-2022)[1]

24%	22%	14%	32%	45%	22%	21%	24%

[1] Source: US Department of Labor, Bureau of Labor Statistics, www.projectionscentral.com

Top Cisco Certifications by Salary[2]

ICT salaries are on the rise, particularly for professionals with specialized training or certification. For example, Cisco network administration knowledge and skills result in a 9% higher salary on average.

$71,482
CCENT®
Cisco Certified Entry Networking Technician

$81,308
CCNA®
Cisco Certified Network Associate - R&S

$90,833
CCNP®
Cisco Certified Network Professional

Additional Cisco certifications are available, including CCNA Security, CCNA Voice, CCIE®, CCDA®, and more.

[2] Source: Global Knowledge, 15 Most Popular IT and Business Certifications for 2014, www.globalknowledge.com/training/generic.asp?pageid=3646

The Impact in Texas

The partnership between Cisco and Texas education institutions has touched the lives of many students and generated a large estimated in-kind contribution towards education.

Impact since program inception in 1997

102,581 Students	**$45.35M** Estimated In-Kind Contribution Value	**1-21, 23-28, 30-33, 35-36 (92%)** Congressional Districts Participating

Impact over the last 12 months

11,538 Students	**13%** Female Students	**251** Instructors	**115** Academies

Education Levels	Secondary Schools	Community Colleges	Universities	Other[3]
Students	29%	45%	11%	15%
Academies	40%	41%	10%	10%

Curricula[4]	Basic ICT	Basic Networking	Intermediate Networking	Advanced Networking
Students	33%	47%	15%	5%

[3] Community-based organizations, middle schools, military, nontraditional educational settings, and post-graduate institutions
[4] Students that enroll in more than one education level or curriculum in 12 months may be counted more than once

County	City	School
Angelina	Lufkin	Angelina College
Austin	Wallis	Brazos ISD Computer Networking Acad
Bell	Killeen	Central Texas College
Bell	Killeen	Killeen Career Center
Bexar	San Antonio	Alamo CC District - Northwest Vista Coll
Bexar	San Antonio	Alamo CC District - Palo Alto College
Bexar	San Antonio	Alamo CC District - San Antonio College
Bexar	San Antonio	Alamo CC District - St. Phillip's College
Bexar	San Antonio	DeVry University, San Antonio (ACC)
Bexar	San Antonio	Hallmark College
Bowie	Texarkana	Texarkana College Academy
Bowie	Texarkana	Texas High School
Collin	Allen	Harmony School of Business
Collin	Frisco	Collin College
Collin	Frisco	Collin College-Preston Ridge Campus
Collin	Frisco	Frisco ISD
Collin	Plano	Plano ISD
Collin	Princeton	Princeton High School CATE Center
Collin	Wylie	Wylie ISD
Comal	Sattler	Comal Hawk Academy
Cooke	Gainesville	North Central Texas College
Dallas	Dallas	Bill J. Priest Institute
Dallas	Dallas	El Centro College
Dallas	Dallas	Mountain View College
Dallas	Dallas	Richland College
Dallas	Farmers Branch	Brookhaven College
Dallas	Garland	North Garland High School
Dallas	Irving	Academy of Irving ISD
Dallas	Irving	DeVry University, Irving (ACC)
Dallas	Irving	North Lake College
Dallas	Irving	Internat'l Fdn What About The Children
Dallas	Mesquite	DeVry Univ, Mesquite Center (ACC)
Dallas	Richardson	Berkner High School
Dallas	Richardson	Texas Premier Technology Institute Inc.
Denton	Denton	Advanced Technology Complex
El Paso	El Paso	El Paso CC -Valle Verde Campus
El Paso	El Paso	Hanks High School
El Paso	San Elizario	San Elizario ISD
Erath	Stephenville	Tarleton Networking Academy
Fort Bend	Wharton	Wharton County Junior College
Gaines	Seminole	Seminole Independent School District
Gregg	Kilgore	Kilgore College
Gregg	Longview	LeTourneau University
Harris	Baytown	Lee College
Harris	Cypress	Cypress Springs High School
Harris	Cypress	Cypress Woods High School
Harris	Cypress	Lone Star College - Cy-Fair
Harris	Houston	Alief Academy
Harris	Houston	Barbara Jordan High School for Careers
Harris	Houston	Cypress Creek Networking Academy
Harris	Houston	DeVry University, Houston (ACC)
Harris	Houston	Elsik High School
Harris	Houston	Genesys Academy
Harris	Houston	Hastings High school
Harris	Houston	Houston Community College
Harris	Houston	Houston CC Southwest Academy
Harris	Houston	Lone Star College - North Harris
Harris	Houston	Nimitz Sr. High School
Harris	Houston	Pasadena ISD LP Card Career Tech Ctr
Harris	Houston	Texas Southern University
Harris	Houston	The Guthrie Center
Harris	Houston	University of Houston Clear Lake
Harris	Humble	Humble ISD Career and Tech Ed Center
Harris	Katy	Miller CTC Academy
Harris	Kingswood	Lone Star College - Kingwood
Harris	Klein	Klein High School 12
Harris	Pasadena	San Jacinto CC Central Campus
Harris	Tomball	Lone Star College - Tomball
Harrison	Marshall	Texas State Tech College - Marshall
Hidalgo	McAllen	South Texas College
Hidalgo	Pharr	Pharr-San Juan-Alamo North HS
Hockley	Levelland	South Plains College
Hood	Granbury	Granbury Independent School District
Hopkins	Cumby	Cumby ISD
Jefferson	Beaumont	Lamar Institute of Technology
Jefferson	Port Arthur	Lamar State College - Port Arthur
Johnson	Burleson	Burleson ISD
Lamar	Paris	Paris Junior College Academy
Lubbock	Lubbock	Education Service Center, Region 17
McLennan	Waco	McLennan Community College
McLennan	Waco	Texas State Technical College, Waco
Midland	Midland	Midland College

	Odessa	Odessa College			Tarrant County College, South Campus
Montgomery	The Woodlands	The Woodlands High Schools		Grapevine	Grapevine-Colleyville CHHS
	Willis	Willis ISD		Hurst	Tarrant County College, Northeast
Nueces	Corpus Christi	Del Mar College		North Richland Hills	Birdville Career & Technology Center
Orange	Orange	Lamar State College - Orange	Tom Green	San Angelo	Howard College/San Angelo ISD
Parker	Weatherford	Weatherford College	Travis	Austin	Akins High School
		Weatherford ISD			Austin Community College
Potter	Amarillo	Amarillo College	Victoria	Victoria	The Victoria College
Randall		Canyon ISD-Randall			Laredo Community College
Sherman	Stratford	Stratford High School - Stratford ISD	Webb	Laredo	United High School
Smith	Tyler	Tyler Junior College			United South High School
Tarrant	Arlington	CCI Training Center Arlington (ACC)	Wichita	Bluegrove	VC Century City Academy
		Tarrant County College, Southeast	Wilbarger	Vernon	Vernon College
	Bedford	Buinger Career & Technology Academy			Vernon High School
	Everman	Everman High School	Williamson	Leander	Leander ISD
	Fort Worth	Carter-Riverside High School	Wilson	La Vernia	La Vernia ISD
		EMS - Hollenstein Career Tech Center			

ACC = Accredited Career College

Impact Story

Shining Star Community College Attracts New Academy Students and Changes Lives

They've nicknamed it the *fish bowl*. The new Networking Academy lab currently under construction at North Lake College has one wall made entirely of glass. Students and visitors have an unobstructed view of the kind of network operations that run schools, companies, governments, and the Internet itself.

The fish bowl will be a hub of activity with some 700 students each semester using the lab to get hands-on experience designing, configuring, and troubleshooting networks. The skills they obtain will make them among the most marketable graduates in the school. And the word is out, through many channels, bringing in new academy students at an impressive rate.

North Lake College is one of the top 10 academy schools worldwide for growth in enrollment. North Lake is a two-year public community college serving Irving, Texas, and northern Dallas County.

What is it that's attracting students to this Texas community college in record numbers? The clear window of the networking lab provides part of the answer: think of it as a symbol of the open, connected relationship of North Lake's Networking Academy program to the community of Dallas-Fort Worth. According to instructor and program director Jerry Mesquita, "The academy courses are the surest route to a good paying job. That's life-changing for so many people in this community who are unemployed or barely getting by working at minimum wage jobs just to feed their families."

Nearly 100% of the students who complete the academy courses at North Lake obtain a job. Over 80% of these enroll in advanced courses and earn one or more Cisco certifications. Because of these outstanding results, the college funded the academy program with $250,000 to build the new lab and install Cisco equipment.

Before joining the faculty, Jerry had been a telecommunications network engineer for over 20 years. He had the experience to work almost anywhere, but decided it was time to pursue his dream of becoming a teacher. His original idea was to teach math, physics or engineering, but when he discovered the Cisco Networking Academy program, he decided to enroll in a course himself to see what it was like. "The curriculum has improved dramatically through the years, but even then I was impressed at how it was set up. As an experienced engineer, I could see how taking these courses, which did a great job of combining theoretical knowledge with hands-on lab practice, would equip students with highly marketable skills."

However, at that time the academy was going through a crisis: they were losing faculty to higher paying jobs in industry. Jerry was now on a dual mission: he wanted to teach, and he wanted to save the Cisco Networking Academy program at North Lake. He asked the administration to put him in charge, and then he went to work revitalizing it.

Instructor Advocacy Builds Student Opportunities

Even though Networking Academy courses turn out marketable graduates, it does not guarantee that companies will find them. Jerry set out to build relationships with area companies. "We make a point of getting to know the hiring managers at these companies. We want them to have North Lake College graduates on their radar. We also want to understand the kinds of candidates that they're looking for, so we can enhance our courses to meet their needs."

For example, one company that Jerry met with needed job candidates who were familiar with Linux, so Jerry helped get a Linux class added to the course offerings at North Lake. This company then hired 15 academy graduates. Another area company was interested in bilingual tech graduates. "We have a good percentage of students who are bilingual, so we were able to bring great candidates to their attention."

Jerry has learned that companies really appreciate it when instructors can recommend students who are a good fit for particular job openings. "Recruiting is expensive and time-consuming. And it's often hit or miss for companies. By taking the time to get to know more about these companies, our recommendations prove useful. The companies keep coming back to us for filling new positions. That drives up our job placement numbers, which in turn strengthens our reputation in the community."

What Makes Teachers Tick?

When Jerry took over the Networking Academy program at North Lake, there were 4 part-time instructors. Today, the program has 12 instructors with an average of 14 classes each semester, with as many as 40 students in each class.

Some things haven't changed however. Teacher salaries still lag behind industry salaries. Yet the instructors at North Lake are devoted to teaching, and few defect to industry. "People that hang around me know that money is not all that there is. When new instructors begin to see the real changes that we make in people's lives, their motivation grows."

Some of the new instructors have started out teaching part time, planning to move on to industry jobs. But after they see their graduates passing certification exams and getting jobs with big corporations, they stay on at North Lake. Others take a job in industry, but continue to teach part time.

Jerry had a lab assistant who earned a Cisco CCIE certification, and had been part of the academy team for more than 7 years. "I feel like I raised him," Jerry says with a big smile. "He didn't want to leave, but I urged him to look into industry jobs. He was hired by a major corporation almost immediately and makes an amazing salary. But guess what? Next semester he'll come back part time as a teacher."

Jerry described another young man who earned his CCIE certification by the time he was 21. He got a great job and was able to buy a beautiful home. "His parents worked minimum wage jobs, which is the case with a lot of our students. Parents are so proud of their kids for their success, and they're thankful to Cisco and North Lake for this program. I know, because we hear from them all the time."

It Takes a Village
Jerry has many ties to the community, and everywhere he goes, he has a feet-on-the-street philosophy to inspiring people to enroll in academy courses at North Lake. "I talk to people at supermarkets and in church. I look them in the

eye and tell them that this program can change their lives. I've gotten entire families to come to the school and talk to us. I take them to the financial aid office at the college to find out how they can get started."

Jerry is especially proud of the fact that more and more women are enrolling. "They're often the best students in the class. Four of the10 women in the Introduction to Computer Science course contacted me to say they'd like to enroll in my networking courses and earn certifications. They were excited to learn that their Spanish speaking skills and a certification can help them secure a good job even without a college degree."

Jerry takes students to monthly meetings at the nearby Cisco office. He arranges for recruiters to come to North Lake to talk about positions they have open and tell students what to do to be successful.

Academy instructors help students with their resumes, because they know what companies are looking for. They even set up telephone interviews with some of the hiring managers who are close to the program. They listen to the exchange, and then sit down with the students and suggest things they can do to improve their interviewing skills.

All academy students are encouraged to earn one or more certifications before they start job hunting. Jerry says, "That's why I'll keep the lab open any time a student wants to put in extra practice."

Adding Capabilities
Jerry hopes to make some of the Networking Academy courses bilingual. "We already have English as a second language (ESL) courses and an ESL computer lab here at North Lake. But actually conducting the technical courses in Spanish, Portuguese, and English will have a huge impact on increasing enrollment. And because bilingual technical graduates are in high demand, the impact on hiring should be just as big."

He also personally teaches all first semester students so he can get to know their strengths and weaknesses. Before they move on to classes taught by other instructors, Jerry wants to be able to give the instructor his perspective on each student. "We don't necessarily work out a formal plan for each one. But I think it helps for the instructor to be aware of any problem areas, as well as the things that will help a particular student excel. We give the students as much individual attention as we can."

> Graduates email all the time, keeping the instructors up to date on their careers and lives. Some come back to visit. "From time to time, a student will take me out to lunch. 'I can afford to buy you lunch now,' the former student will say. And in that moment, it would be tough to tell which one of us is prouder."

Learn More About Cisco Networking Academy

See videos and more impact stories. Learn how to get involved. www.cisco.com/go/netacad/usc

Cisco Corporate Social Responsibility (CSR)

Cisco CSR efforts are aligned with five focus areas, as illustrated. Cisco Networking Academy is a Society program and Cisco's largest in education.

Cisco In-Kind Contribution Value (IKCV) comprises product donations and pro bono services. Cisco assesses IKCV at fair market value defined by the IRS as the price that inventory, products, or certain professional services would garner on the open market between a company and its direct customers/clients.

All Cisco CSR IKCV – United States	
12 months *(11/1/13-10/31/14)*	**$63,014,402**
Since 2007	**$339,249,606**

csr.cisco.com

Cisco Corporate Social Responsibility

We create opportunities to transform lives, communities, and the environment through the combined power of human collaboration and networked connections. We call this "impact multiplied." Together with others, we apply technology to unlock the intelligence and fuel the innovation needed to address some of the world's most pressing problems.

Our corporate social responsibility efforts focus on five areas: improving the well-being of people and communities around the world, using our technology to improve environmental sustainability, conducting our business ethically, creating a workplace where our employees thrive, and maintaining our high standards for ethics, labor rights, health, safety, and the environment throughout our supply chain.