Cisco Networking Academy: Oregon Profile

Cisco® Networking Academy® is playing a critical role in the U.S. economic recovery by preparing students for the sustainable jobs that government, education and industry all agree will fuel America’s ability to innovate and compete, not just today but in the future. As the focus turns to infrastructure, Networking Academy provides students with critical IT and networking skills to design, build, and maintain the infrastructure highway that both the public and private sector now depend on for sustainability.

The new Obama administration clearly recognizes the importance that technology plays in preparing students to compete in a 21st century global economy. In a speech on January 8, 2009, at Virginia's George Mason University, President Obama highlighted the current science and technology skills gap in the United States and the urgent need to address it:

“To give our children the chance to live out their dreams in a world that’s never been more competitive, we will equip tens of thousands of schools, community colleges, and public universities with 21st century classrooms, labs, and libraries. We’ll provide new computers, new technology, and new training for teachers, so that students in Chicago and Boston can compete with kids in Beijing for the high-tech, high-wage jobs of the future.”

Cisco Networking Academy is a proven model for delivering 21st century learning because it delivers:

• rigorous and interactive curricula licensed at no cost to nonprofit educational institutions
• an e-learning platform that supports different learning styles
• web-based content available to students 24/7
• online assessments
• student performance tracking
• hands-on labs
• instructor training and support

Networking Academy is a unique public-private partnership between educational institutions, national, state and local government, and community-based organizations, currently educating more than 128,000 students in over 2,200 U.S. educational institutions.

As an education solution, Networking Academy encourages seamless educational pathways between secondary and post-secondary institutions by using curricula aligned to national and state education standards for math, language arts, and technology and industry certifications. These courses also help students prepare to pursue degrees related to science, technology, engineering, and math (STEM). Networking Academy courses provide instructors with tools to help students make the connection between their educational experience and their careers. In the United States, academies are located in high schools, technical schools, colleges, universities, and community-based organizations.

Cisco Networking Academy provides:

• IT and networking skills mapped to high-skill, high-demand, high-wage 21st century jobs across virtually every industry
• sustainable partnerships at all levels of education, including community colleges at the forefront of workforce development and retraining
• strong alignment with high school career and technical education programs that build technical skills and create pathways for high school graduates going either directly into the workforce or on to post-secondary education

• the skilled pipeline of talent required to design, build and maintain the infrastructure needed for economic recovery

Included in each state profile are Networking Academy statistics, IT workforce projections, and student/graduate stories. These state-by-state profiles will provide you with important information about the value Cisco brings to government, education and business through delivery of IT/networking skills and knowledge. Cisco Networking Academy educates the architects of today’s networked economy.

Profiles are updated annually with core content, and we will continue to add student/graduate profiles. For your convenience, the library of profiles for each state, plus the District of Columbia and the United States as a whole, are accessible at http://www.cisco.com/go/netacadresourcecenter.

We welcome your suggestions for future profiles. Please send any questions and feedback to our U.S. Marketing Team via Nancy Bischoff at nbischof@cisco.com.

Learn More
Table 1 lists data about academies in Oregon. Table 2 lists information about Networking Academy curricula in Oregon, and Table 3 shows information by student education level.

For additional information about Cisco Networking Academy, visit http://www.cisco.com/go/netacad

Table 1. Cisco Networking Academy in Oregon

| Networking Academy students | 898 |
| Female Networking Academy students | 10% female |
| Distinct cumulative academy students (having successfully completed a course) | 5411 |
| Academies | 26 |
| Academy instructors | 39 |
| Total estimated cumulative contribution value to Oregon academies* | $3,610,171 |

Sources: AME/MRE FULL Package_10 31 08 Quarterly Metrics Date: Nov 13, 2008
Cumulative students are distinct; therefore, each student is only counted once.
*This estimate includes donations and discounts made to educational institutions implementing Cisco Networking Academy within Oregon.
*Sources: AME/MRE report #3616student and instructor enrollment by year 2008.11.24_JBZ_v8.xls

Table 2. Networking Academy Curricula in Oregon

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>All</th>
<th>ITE</th>
<th>CCNA 1, 2</th>
<th>CCNA 3, 4</th>
<th>Advanced Technologies and Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of academies by curriculum</td>
<td>26</td>
<td>58%</td>
<td>58%</td>
<td>46%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The above curricula represent the core Networking Academy curricula.
*Includes CCNP, Security, Wireless, Java, UNIX and Panduit Network Infrastructure Essentials (PNIE)
Academies often teach multiple curricula and may be counted more than once in this table.
Source: AME/MRE rpt #3651 as of 10.31.08 v2 Date: Dec 8, 2008
### Table 3. Oregon Academies and Students by Education Level

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Total Number</th>
<th>Secondary Schools</th>
<th>Community Colleges</th>
<th>Universities</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon Students*</td>
<td>898</td>
<td>51%</td>
<td>49%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Oregon Academies*</td>
<td>26</td>
<td>65%</td>
<td>35%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Sources: AME/MRE FULL Package_10 31 08 Quarterly Metrics Date: Nov 13, 2008

*For academies that self identify as more than one education level, the academies and students in this table are distributed proportionately across the education levels.

Academies represented in “Other” category include the following: community-based organizations, middle schools, the military, nontraditional educational settings, and post-graduate institutions.
Active Cisco Networking Academies in Oregon

U.S. Congressional District Database

Data for this report was gathered using the U.S. Congressional District Database. This tool was developed to communicate with congressional representatives about Cisco Networking Academy implementation in their home districts. The database maps active academies by congressional district or by all districts within a state, providing academy name, city, state, and congressional district. The listing by state is updated annually.

Table 4 lists information about academies in Oregon congressional districts.

Table 4.  Networking Academies in Oregon Congressional Districts

<table>
<thead>
<tr>
<th>Number of Oregon Congressional Districts</th>
<th>Number of Oregon Congressional Districts with Networking Academies</th>
<th>Number of Oregon Congressional Districts without Networking Academies</th>
<th>% Oregon Congressional District Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

Academies listed here have taught a class with at least three students, or adopted a new curriculum, within the last twelve months

Source: MRE/Academy Connection, U.S. Congressional District Database   Date: October 31, 2008

Active Oregon Cisco Networking Academies by Congressional District

* Indicates Cisco Networking Academy Training Center

Academies listed here have taught a class with at least three students, or adopted a new curriculum, within the last twelve months

Source: MRE/Academy Connection, U.S. Congressional District Database   Date: October 31, 2008

Congressional District 1

- Academy Capital Center High School (Beaverton)
- Heald College Portland (Portland)
- Liberty High School (Hillsboro)
- Yamhill-Carlton High School (Yamhill)

Congressional District 2

- Baker High School (Baker City)
- Central Oregon Community College (Bend)
- Hood River Valley High School (Hood River)
- La Pine High School (La Pine)
- Lakeview High School (Lakeview)
- Redmond High School (Redmond)
- *Treasure Valley Community College (Ontario)
- Wahtonka 9th Grade Campus (The Dalles)

Congressional District 3

- Benson Polytechnic High School (Portland)
- De La Salle Catholic High School (Portland)
• Mt. Hood Community College (Gresham)
• *Portland Community College (Portland)
• The Center For Advanced Learning (Gresham)

Congressional District 4
• Cottage Grove High School (Cottage Grove)
• LBCC (Albany)
• Powers School District (Powers)
• *Southwestern Oregon Community College (Coos Bay)
• Sutherlin Cisco Academy (Sutherlin)
• *West Albany High School (Albany)

Congressional District 5
• *Chametaka Community College - Regional (Salem)
• Oregon Coast Community College (Newport)
• North Salem High School (Salem)
Cisco Networking Academy: Workforce Development in Oregon

Cisco Networking Academy® is ready to help U.S. workers learn critical IT and networking skills through academies located in high schools, community colleges, four-year colleges, and nontraditional settings. Developing in-demand technical skills in a timely, focused program enables students to quickly find and retain sustainable, high-paying jobs. Academy courses map to industry certifications and prepare students for technical jobs in a new, improved technical infrastructure across the nation. Even students who complete introductory courses will be prepared to work for companies that depend on a technical infrastructure for business sustainability.

“Obama’s pro-tech agenda could increase the number of technology jobs in the United States by 10 percent, adding about 300,000 high-paying IT positions.” –Katherine McGuire, VP of government relations, Business Software Alliance

“Even with this economic downturn, the jobs outlook in IT for 2009 is better than that of many other industries, since IT is no longer at the peripheral of industries but at the core of their competitive edge, and IT will play a critical role in the infrastructure build out.” –David Foote, CEO of Foote Partners LLC, which analyzes IT wages and hiring data

As the U.S. remains focused on economic recovery throughout 2009, there is a growing emphasis on upgrading the educational infrastructure to deliver the required knowledge and skills to build the needed technical workforce to support and maintain technology infrastructure assets and requirements. Just as the interstate highway investment created millions of construction jobs, which were then followed by maintenance and automotive jobs in the long term, so technology investments will initially create jobs necessary to design and deploy technology infrastructure, and these jobs will be followed by an array of new business opportunities.

“Investments in America’s digital infrastructure will spur significant job creation in the immediate term. An investment of $40 billion in IT network infrastructure in 2009 will create more than 949,000 U.S. jobs, more than half of which will be in small businesses.” –Technology CEO Council press release

Cisco Networking Academy addresses the need for 21st century teaching and learning models that prepare students to move into the pipeline of talent needed to fill these high-skill, high-wage, high-demand careers.

"We will enable students of all ages to learn in 21st century classrooms, labs, and libraries, to help our students compete with any worker in the world.” –American Recovery and Reinvestment Plan press release

In a recent report, the Information Technology and Innovation Foundation “finds that investments in America’s digital infrastructure will spur significant job creation in the short run. Specifically, ITIF estimates that an additional investment of $30 billion in America’s IT network infrastructure in 2009 will create approximately 949,000 U.S. jobs.”

**IT Occupational Data**

Table 5 lists information about IT-related occupations in the United States, and Table 6 lists this information for Oregon.

**Table 5. Selected IT-Related Occupations in the United States**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Computer Support Specialists</td>
<td>552,000</td>
<td>624,000</td>
<td>71,000</td>
<td>21.9</td>
<td>24,000</td>
<td>525,570</td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>504,000</td>
<td>650,000</td>
<td>146,000</td>
<td>29</td>
<td>28,000</td>
<td>446,440</td>
</tr>
<tr>
<td>Network and Computer Systems Administrators</td>
<td>309,000</td>
<td>393,000</td>
<td>83,000</td>
<td>27</td>
<td>15,000</td>
<td>309,660</td>
</tr>
<tr>
<td>Network Systems and Data Communications Analysts</td>
<td>262,000</td>
<td>402,000</td>
<td>140,000</td>
<td>53.4</td>
<td>19,000</td>
<td>216,050</td>
</tr>
<tr>
<td>Computer and Information Systems Managers</td>
<td>264,000</td>
<td>307,000</td>
<td>43,000</td>
<td>16.4</td>
<td>9,000</td>
<td>264,990</td>
</tr>
</tbody>
</table>


**Table 6. Selected IT-Related Occupations in Oregon**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Support Specialists</td>
<td>7867</td>
<td>9010</td>
<td>1143</td>
<td>14.5</td>
<td>218</td>
<td>6370</td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>3394</td>
<td>3896</td>
<td>502</td>
<td>14.8</td>
<td>92</td>
<td>3550</td>
</tr>
<tr>
<td>Network and Computer Systems Administrators</td>
<td>3096</td>
<td>4102</td>
<td>1006</td>
<td>32.5</td>
<td>141</td>
<td>3140</td>
</tr>
<tr>
<td>Network Systems and Data Communications Analysts</td>
<td>2588</td>
<td>3347</td>
<td>759</td>
<td>29.3</td>
<td>111</td>
<td>2310</td>
</tr>
<tr>
<td>Computer and Information Systems Managers</td>
<td>2878</td>
<td>3302</td>
<td>424</td>
<td>14.7</td>
<td>99</td>
<td>3060</td>
</tr>
</tbody>
</table>


Oregon Student and Graduate Profile``

For Jeff Swank, being able to live and work in his home community and having the flexibility that comes from running a business of his own is about as good as it gets. Despite earning an associate of applied science degree in engineering from Southwest Oregon Community College in 1998, three years passed before Jeff focused on technology for his livelihood.

Jeff learned about Cisco® Networking Academy® from his grandfather, an electrical engineer who has worked in the telecommunications industry for a number of years. Jeff had always been interested in electronics, but never really worked in the field, pursuing religious studies and working for a short time in the insurance industry instead. Heeding his grandfather’s advice to acquire additional skills, Jeff returned to Southwest Oregon Community College in the fall of 2001, this time enrolling in the Networking Academy to learn Cisco equipment and networking principles. While Jeff was studying the Networking Academy curriculum, his “general knowledge of computers, ability to pick things up quickly, and a desire to know the material” served him well. Class time with instructors and hands-on labs also were important. Jeff shares, “It gave a focused environment to learn the material that trying to learn it on your own doesn’t give.”

“Go for it! Make sure you're ready to focus on the coursework and immerse yourself in the labs. The courses are a great foundation: they give you the networking principles and [the] OSI [model] applies to more than networking.”

Jeff Swank

Jeff earned his Cisco Certified Network Administrator (CCNA®) certification in 2002, which was quickly followed by three other certifications: Cisco Certified Network Professional (CCNP®), CompTIA Network+, and Microsoft MCP Small Business Specialist. When asked about his pursuit of multiple certifications, Jeff commented, “The Networking Academy was my first experience with certifications and something I really enjoyed.”

In February 2002, Jeff started his own company, ComputerWorks, which has since been awarded contracts with the City of Coos Bay and a number of local businesses. “For the work I do, including a lot of desktop support and Windows server, I needed a broad knowledge base. There is plenty of work here for those skills” says Jeff. “Until recently it was primarily the general networking principles that were most important; however, we picked up a client that uses Cisco equipment and since then I have been able to put that specific knowledge to good use.”

When he is not working, Jeff engages in religious studies and coaches a boys’ basketball team. His future career goals include earning his Microsoft Certified Systems Engineer certification and completing a bachelor’s degree in Bible studies and possibly engineering. But for now, he intends to “stay where I am and be a part of everything with my family.” With a business of his own, a wife and four children at home, and extended family nearby, life is good and Jeff is thankful for his grandfather’s good advice.

Jeff learned about Cisco Networking Academy from his grandfather, an electrical engineer who has worked in the telecommunications industry for a number of years.
Jeff’s advice to others who may be interested in the Networking Academy is to “Go for it! Make sure you’re ready to focus on the coursework and immerse yourself in the labs. The courses are a great foundation: they give you the networking principles and [the] OSI [model] applies to more than networking.”

For information on the Networking Academy at Southwest Oregon Community College: http://www.socc.edu/index.html