# LoneStar College – Tomball
## Cisco Networking Academy

(To Navigate from Outline to contents hold ctrl key down and then select outline item by clicking with mouse. To return to outline press Ctrl Home)

<table>
<thead>
<tr>
<th>What is it..........</th>
<th>Courses &amp; Certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CCNA</td>
</tr>
<tr>
<td></td>
<td>Classes</td>
</tr>
<tr>
<td>Credit vs. CE (Community Education)</td>
<td></td>
</tr>
<tr>
<td>Book Options</td>
<td>Approximate Cost</td>
</tr>
<tr>
<td>Course Schedule</td>
<td>Career Information</td>
</tr>
<tr>
<td>Career Prep and Certifications</td>
<td></td>
</tr>
</tbody>
</table>

## What is it..........

As networking capabilities continue to grow and expand, corporations, nonprofits, schools, hospitals, governments, and NGOs around the world are experiencing a shortage of qualified information and communication technology (ICT) specialists to design, install, secure, and manage their networks.

Students who gain ICT knowledge and practical experience through the Networking Academy program can earn Cisco career certifications and help fill an estimated eight million networking jobs around the world.

Cisco Networking Academy has been educating the architects of the networked economy since 1997. Networking Academy uses the two great equalizers in life—education and the Internet—to teach ICT skills to students from virtually every socioeconomic background and region of the world. These skills help narrow the technology skills gap while enabling communities and countries to compete in the twenty-first century economy.

Academies are located in high schools, two-year colleges and technical schools, four-year colleges, universities, and community-based organizations around the world. All students have access to the same high-quality e-learning curricula, hands-on labs, and online assessments.

Networking Academy delivers marketable ICT skills to approximately 700,000 students in more than 160 countries each year. The program leverages the global human network to:

- Empower people to realize the dream of a better life.
- Stimulate the development of the global knowledge economy.
- Encourage long-term economic growth in communities around the world.

## Courses & Certifications

Networking Academy courses include rich multimedia content, Flash-based interactive activities, videos, games, and quizzes to support a variety of learning styles and help increase knowledge retention. Courses are delivered online in multiple languages to help students succeed on a global scale.

To help students prepare for a growing number of networking positions in a variety of industries, Networking Academy courses emphasize the practical application of knowledge and the development of career skills such as critical thinking, problem solving, and collaboration.
IT Essentials: PC Hardware and Software
IT Essentials provides an overview of computer fundamentals and an introduction to advanced concepts.

CompTIA A+

CCNA Discovery
CCNA Discovery provides an overview of general networking theory and opportunities for practical experience, career exploration, and soft-skills development.

CCENT

CCNA Routing & Switching
CCNA Exploration provides a comprehensive overview of foundational to advanced networking concepts, with an emphasis on theory and practical application.

CCNA

CCNA Security
CCNA Security introduces the core security concepts and skills needed to install, troubleshoot, and monitor a network to maintain the integrity, confidentiality, and availability of data and devices.

CCNA Security

CCNP
CCNP teaches the advanced skills needed to install, configure, monitor, and troubleshoot enterprise-sized networks and manage wireless, security, and voice applications.

CCNP

CCNA

CCNA is a beginning-level program that aims to certify a solid foundation in Cisco networking. Cisco’s certification programs are about certifying the competence of Internetworking professionals in routing, switching and connectivity. CCNA requires passing only one written exam. Once this certification has been obtained, it can be a stopping point, as you’ve become qualified in Routing and Switching (valid for three years then you must recertify), or can be a starting point for a Professional-level certification.

Classes

There are 4 courses to take for the CCNA R&S certification program. At LSC-Tomball we use the Cisco CCNA R&S curriculum.
ITCC1475 Introduction to Networking
ITCC1476 Routing & Switching Essentials
ITCC2478 Scaling Networks
ITCC2479 Controlling Networks
It is recommended that these courses be taken in order.

Credit vs. CE (Community Education)

To take the course for credit a student must meet all of the college requirements for admission and registration. Credit students receive credit hours and grades on a transcript. CE students will get CEU's for completion of the course. CE and Credit students attend the same class period and do the same work and labs and take same exams. Both type of students attend the same class and perform the same work such as lectures, labs, module exams, final exam, final hands on skills exam. If a student takes a course through CE and wants to convert to credit then can be done after course is completed. Grades are maintained for both types of students and will be archived. If the CE student wants to go to credit then the appropriate grade can be recorded. There are other prerequisites required by LSC-Tomball student registration that must be met before the course credit can be applied.

Book Options

The Cisco Academy curriculum is completely on line and may be accessed from anywhere there is an internet access (Broadband is recommended as Dial up would be
extremely slow). Books are available and it is an option to purchase a book but not required. Books are not carried in our bookstore. One of the cornerstone characteristics of the Academy program is that it will be updated to current requirements needed in the industry (such as Best Practices do to changing business models, new and improved equipment used in Networking)

**Approximate Cost**

Each course is approximately $275. This means that the entire Cisco Academy CCNA Routing and Switching program will cost approximately $1100 and is one of the best under advertised bargains you will find. Since books are optional this may or may not be another expense. The printed book will be announced at the first day of class. The books will be the same chapters and content as the on-line curriculum. On line curriculum can be changed easily but sometimes the book publisher does not update a book until a certain percentage of change is recognized and then they will republish a book. At times our curriculum has been modified in as little as 1 month up to 6 months.

**Course Schedule**

Course will be offered in 8 week formats (except for summer sessions that will be 5 week format, meeting MTWTh nights from 6 to 10p). The 8 week format for Fall and Spring will meet 2 nights a week (either Mon Wed or Tue Thur) from 6p to 11p.

**Career Information**

As networking technologies bring new economic and social opportunities to communities throughout the world, businesses, nonprofits, hospitals, schools, and government organizations are experiencing growing demand for networking professionals to design, build, maintain, and secure their networks.

Networking Academy aims to equip individuals with the knowledge and hands-on experience needed to help meet this demand in a variety of industries ranging from broadband and wireless to healthcare and green technologies.

One of our learning partners, CompTIA, has developed a TechCareer Compass to give you a better idea of the job opportunities available for networking professionals.

**Career Prep and Certifications**

Interactive learning tools and activities are integrated into Networking Academy courses to help students develop practical experience and 21st century career skills such as problem solving, collaboration, and critical thinking.

Our courses map to globally recognized certifications to help students and alumni stand out in the job market and demonstrate their skills and competencies to employers. To learn more, visit Courses & Certifications.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Certification</th>
<th>Description</th>
<th>Associated Career Paths</th>
</tr>
</thead>
</table>
| IT Essentials: PC Hardware and Software | CompTIA A+    | The CompTIA A+ certification for computer support technicians demonstrates competence in areas such as installation, preventative maintenance, networking, security, and troubleshooting. | IT technician  
|                                        |               |                                                                             | IT administrator  
<p>|                                        |               |                                                                             | Field service technician |</p>
<table>
<thead>
<tr>
<th>CCNA Routing &amp; Switching</th>
<th>CCENT R&amp;S</th>
<th>The Cisco CCENT certification for entry network technicians validates the ability to install, operate, and troubleshoot a small enterprise branch network and perform basic network security tasks.</th>
<th>Help desk technician Network support technician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Networking &amp; Routing and Switching Essentials</td>
<td>CCNA R&amp;S (ICND2)</td>
<td>The Cisco CCNA certification for network associates validates the ability to install, configure, operate, and troubleshoot medium-sized routed and switched networks, and implement and verify connections to remote sites in a wide-area network (WAN).</td>
<td>Network administrator Network installer Network engineer</td>
</tr>
<tr>
<td>CCNA Routing &amp; Switching</td>
<td>CCNA R&amp;S (Composite)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Combination of CCENT R&amp;S passing and ICND2 passing results in CCNA R&amp;S Certification</td>
<td>Routing &amp; Switching Essentials</td>
<td>Scaling Networks</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>CCNA R&amp;S Composite exam</td>
<td>Introduction to Networking</td>
<td>Routing &amp; Switching Essentials</td>
<td></td>
</tr>
<tr>
<td>Scaling Networks</td>
<td>Scaling Networks</td>
<td>Controlling Networks</td>
<td></td>
</tr>
<tr>
<td>CCNA Security</td>
<td>CCNA Security</td>
<td>The Cisco CCNA Security certification for network security professionals validates the knowledge needed to install, troubleshoot, and monitor Cisco network security devices; develop a security infrastructure; recognize network vulnerabilities; and mitigate security threats.</td>
<td>Network security specialist</td>
</tr>
</tbody>
</table>
| CCNP Routng, Switching, Trouble Shooting (TShoot) | CCNP | The Cisco CCNP certification for network professionals validates the knowledge and skills needed to install, configure, and troubleshoot converged local and wide area networks, and manage routers, switches and edge applications that integrate voice, wireless, and security into the network. | Level II network engineer  
Network technician |