Cisco Networking Academy Program
New Cisco CCNA Curricula

New Curricula and Certification

Q. Why did Cisco® create two new CCNA® curricula?
A. The new CCNA curricula were created in response to input from administrators, instructors, and students. CCNA for advanced learning (CCNA-A*) and CCNA for foundational learning (CCNA-B*) target different student segments based on their academic experience and goals. By using different methodologies to teach students with different educational backgrounds and interests, we can help students successfully achieve their learning goals. This will improve both student and instructor satisfaction and help increase enrollment rates.

Both curricula are designed to help students prepare for IT professional careers and the CCNA certification exam. CCNA-A is designed for students with advanced problem solving and analytical skills, such as those who are pursuing degrees in engineering, math, or science. The CCNA-A curriculum can be integrated into technology curricula or continuing education programs at postsecondary institutions such as universities, colleges, and career and technical schools. CCNA-B is designed for students with basic PC usage skills and can be delivered as an independent curriculum or integrated into broader courses of study at upper-secondary institutions, career and technical schools, and colleges.

As an example, students entering the CCNA-A curriculum will be expected to know binary math and understand the concept of algorithms whereas students entering the CCNA-B curriculum will not be expected to have this knowledge and the curriculum will provide expanded explanations or tools such as a binary calculator.

∗Please note that CCNA-A and CCNA-B are not the official names of the curricula. Formal names will be communicated when the new CCNA curricula becomes available.

Q. Given their differences, how can CCNA-A and CCNA-B both align with the CCNA certification?
A. The CCNA-A and CCNA-B courses teach the same applied skills but present the information in different ways to appeal to the two student segments. Each curriculum provides relevant and effective lessons to engage students and ensure they are successful in learning the material in a way that aligns with their educational backgrounds and goals.

Key Features and e-Doing

Q. What are the main features of CCNA-A and CCNA-B?
A. The CCNA-A and CCNA-B curricula help prepare students for IT professional careers and the CCNA certification exam.

New features in both CCNA-A and CCNA-B are as follows:

- Embedded “e-Doing,” which uses the capabilities of a computer to provide guidance and opportunities for exploration and experimentation
- A new graphical user interface (GUI) that engages students and facilitates instruction with an attractive “look and feel” and more interactive activities
An introduction to advanced technologies and converged networks

A design that enables more efficient translation to support Cisco's commitment to delivering the curricula in multiple languages

Key Features of CCNA-A:

- Designed for students with advanced problem solving and analytical skills, such as those who are pursuing degrees in engineering, math, or science
- Can be part of an integrated curriculum or continuing education program at postsecondary institutions, such as career and technical schools, colleges and universities
- Designed to allow students to learn skills in a more rigorous, comprehensive, theoretical, and practical way that is reflective of standard college and university-level educational practices
- Uses language that allows for integration with other engineering concepts
- Presents an integrated and comprehensive coverage of networking topics, from fundamentals to advanced applications and services
- Includes highly complex and challenging hands-on labs
- Offers more flexibility in the delivery of the courses
- Designed to help prepare students for continued education and IT professional careers after the completion of the four-course curriculum

Key Features of CCNA-B:

- Designed for students with basic PC usage skills
- Can be delivered as an independent curriculum or integrated into broader course studies at upper-secondary institutions, career and technical schools, and colleges
- Maps directly to everyday experiences with networks and covers important networking concepts based on the types of practical network environments students may encounter; ranging from small office and home office (SOHO) networking to more complex enterprise and theoretical networking models covered later in the curriculum
- Offers a hands-on, career-oriented approach to learning networking that emphasizes practical experience
- Includes activities that emphasize the practical applications of networking in terms of implementation and career opportunities
- Teaches applied skills midway through the four-course series to make IT relevant, encourage students to consider additional education in IT, and help students prepare for entry-level IT careers

Q. What is e-Doing?

A. e-Doing is a design philosophy that applies the principle that people learn best by interacting with computer-based activities. The Cisco Networking Academy® Program has always emphasized the hands-on practical aspects of learning. e-Doing is an attempt to bring that same practicality to the computer experience. e-Doing emphasizes meaningful student engagement by promoting exploration and experimentation with electronic tools for scientific visualization and network simulation that results in rich feedback and interactivity. e-Doing also enables instructors to use multiple modalities to engage students in the learning of course objectives that are logically connected to each other and introduced in the context of students' lives and career opportunities.
Q. Why is e-Doing such an important part of the new CCNA curricula?
A. The presence of e-Doing in the new curricula effectively creates a toolkit that enables instructors to deliver an interactive, multi-modality learning experience with the following characteristics:

- Presents new concepts and skills in context, using real-world scenarios and examples
- Provides many opportunities for practice and feedback
- Emphasizes the use of computers to visualize complex ideas
- Promotes the exploration of networking concepts and experimentation with tools such as Packet Tracer and interactive Flash-based activities to help students develop a greater understanding of network technologies
- Provides network simulations to increase the amount of console-based practice a student can gain to supplement hands-on time with real equipment
- Uses global and multicultural scenarios to engage students
- Applies more specific scenarios and examples during in-class discussions and activities or homework assignments
- Applies learning strategies that support multiple learning styles such as visual, auditory, and hands-on

Articulation
Q. Will there be a clear articulation path from the CCNA-B curriculum to the CCNA-A curriculum?
A. The CCNA-A and CCNA-B curricula are each developed with the goal of preparing students for the CCNA exam through the use of different pedagogical approaches. While articulation agreements are generally developed at the institution level based on existing programs and pathways, Cisco offers the following information about the course content: CCNA-B course 1 and course 2, plus an additional VLSM practice activity included in course 2, should enable students to earn CCNA-A course 1 equivalent credit.

Q. Will both the CCNA-A and CCNA-B curricula help students prepare for enrollment in the Cisco CCNP® curriculum?
A. Yes, students who complete CCNA-A (courses 1 – 4) or CCNA-B (courses 1 – 4) will be prepared to start the CCNP curriculum. Additionally, an institution may choose to grant CCNA-A credit to students who complete the CCNA-B curriculum.

Equipment
Q. What are the equipment requirements for the CCNA-A and CCNA-B curricula?
A. For existing Academies, we anticipate minimal or no new equipment expenses. Since equipment availability, prices, and discounts vary by theater and region, you should contact your technical manager for specific costs. For your convenience, the technical managers are listed here by region:

- Asia Pacific – Kevin Johnston (kejohnst@cisco.com)
- Canada – Snezhy Neshkova (sneshkov@cisco.com)
- Europe, Middle East, and Africa – Michael Furminger (mfurming@cisco.com)
- Latin America – Kevin Johnston (kejohnst@cisco.com)
- United States – Kevin Hamilton (khamilto@cisco.com)
The new curricula are still under development and we are unable to provide specific equipment lists at this time. The following section lists estimated costs to consider for budget planning purposes. **Keep in mind that the U.S. list price does not include the Academy discount, which may vary by region.** Current Academies are advised to start acquiring new Integrated Services Routers (ISRs) when possible, but these devices are not required to deliver either the CCNA-A or CCNA-B curriculum. New Academies are encouraged to acquire the new ISRs.

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<tr>
<th>Type of Academy</th>
<th>Estimated Not to Exceed (NTE) Per Pod Costs</th>
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<tr>
<td><strong>Current CCNA v3.1 Academy Migrating to CCNA-A Curriculum</strong></td>
<td>No incremental costs if Academy has a current CCNA bundle (see link below). The new curriculum will require at least one pod of real equipment on premises. One pod optimally serves no more than four students simultaneously. A standard pod includes three IOS routers, two IOS switches, and serial cables. In addition to the standard pod, a typical lab configuration will require three desktop PCs, Ethernet cables, and cable making and testing equipment. These are the same additional components that are required by the current CCNA curriculum and therefore no incremental costs are expected for this equipment. Optional equipment includes wireless devices and ISRs. As an interim solution, the embedded e-Doing features in the new curriculum can help address exercises requiring wireless devices.</td>
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<td><strong>New CCNA Academy Teaching CCNA-A Curriculum</strong></td>
<td>The estimated U.S. list price is NTE $10,000 per pod before the Academy discount. The new curriculum will require at least one pod of real equipment on the premises. One pod optimally serves no more than four students simultaneously. A standard pod includes three ISRs, two IOS switches, and serial cables. In addition to the standard pod, a typical lab configuration will require three desktop PCs, Ethernet cables, and cable making and testing equipment. The estimated price per pod does not include the price of these additional components.</td>
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<td><strong>Current CCNA v3.1 Academy Migrating to CCNA-B Curriculum</strong></td>
<td>If an Academy has a current CCNA bundle (see link below), then the only additional cost is for two Linksys wireless routers or equivalent SOHO wireless routers. The estimated U.S. list price is NTE $500 per pod before the Academy discount. The new curriculum will require at least one pod of real equipment on premises. One pod optimally serves no more than eight students simultaneously. A standard pod includes two Linksys wireless routers or equivalent SOHO wireless routers, three IOS routers, two IOS switches, and serial cables. In addition to the standard pod, a typical lab configuration will require three desktop PCs, Ethernet cables, and cable making and testing equipment. These are the same additional components that are required by the current CCNA curriculum and therefore no incremental costs are expected for this equipment.</td>
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<td><strong>New Academy Teaching CCNA-B Curriculum</strong></td>
<td>The estimated U.S. list price is $10,000 per pod before the Academy discount (for required equipment excluding desktop PCs). The new curriculum will require at least one pod of real equipment on premises. One pod optimally serves no more than eight students simultaneously. A standard pod includes two Linksys wireless routers or equivalent SOHO wireless routers, three ISRs, and serial cables. In addition to the standard pod, a typical lab configuration will require three desktop PCs, Ethernet cables, and cable making and testing equipment. The estimated price per pod does not include the price of these additional components.</td>
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The current CCNA bundle can be found on the following Website: [http://cisco.netacad.net/cnams/content/library/curriculum/Ccna.jsp](http://cisco.netacad.net/cnams/content/library/curriculum/Ccna.jsp)

**Q. Can Packet Tracer be used to replace the lab bundles for the new CCNA curricula?**

**A.** No, Packet Tracer is not a replacement for the CCNA hands-on lab equipment. The Network Academy program recommends the use of physical equipment for hands-on learning. This is a key differentiator relative to other programs. Packet Tracer simulations, which are embedded in the new curricula, are supplemental and designed to provide learning opportunities for environments that are not possible to re-create in the classroom.

**Training**

**Q. What instructor training is required to teach CCNA-A and CCNA-B?**

**A.** For existing CCNA instructors, training is optional but strongly recommended. Our goal is to offer a self-paced distance learning solution for current CCNA instructors at no extra cost.*

Current CCNA instructors are encouraged to complete the self-paced distance learning for the new technology content and pedagogy. The recommended time per course is a minimum of 4 to 8 hours for each CCNA-A course, and a minimum of 8 to 10 hours for each CCNA-B course. The optional training materials will be available approximately one month before the new CCNA curricula become available.

New instructors who have not already completed CCNA v3.1 instructor training will be required...
to complete in-person training as well as an online assessment and skills-based assessment. New instructors are expected to complete approximately 60-80 hours of training per course, which is similar to the current time requirements for CCNA v3.x training.

*Training Academies may offer additional training opportunities to their instructors, beyond the self-paced distance learning solution provided by Cisco. As such, there may be fees associated with these supplemental learning events, as determined by the training Academy. Please refer to your training Academy for exact costs.

Q. What materials will be available for instructor training, and in what environments?
A. A wide variety of materials will be available for instructor training, including instructor guides, PowerPoint presentations, case studies, lab materials, and activities. The following types of instructor training will be available: in-person, remote, blended, and independent learning. Independent or self-paced learning will only be available for existing CCNA instructors who choose to pursue re-training upon the initial rollout of the new curricula.

Translation

Q. Will the new CCNA curricula be translated?
A. Translated curricula, including course content and assessments, are a major part of the Networking Academy program’s growth strategy and global sustainability efforts. Cisco’s goal is to support the translation of CCNA-A and CCNA-B to the greatest extent possible to meet instructor and student needs. Cisco plans to start translating the CCNA-A and CCNA-B courses as soon as the English versions become available. The roadmap for each Cisco-sponsored language will be announced in the June-August 2007 timeframe.

Migration

Q. What are the migration plans for the CCNA-A and CCNA-B courses?
A. Institutions that decide to offer the new CCNA curricula can adopt CCNA-A or CCNA-B, based on which curriculum best meets their needs. Unlike the rollout of CCNA versions 2.x to 3.x, there will be no bridge courses. If an institution is midway through delivering CCNA v3.1, the institution should continue with the CCNA v3.1 curriculum. Countries with translated versions of CCNA v3.1 courses may choose to wait until a translated version of the new CCNA curricula is available, or adopt the English version.

Q. Will the CCNA v3.1 courses continue to be offered once CCNA-A and CCNA-B curricula are available?
A. Yes, they will continue to be offered. There are no immediate plans to retire the CCNA v3.1 courses. This curriculum will continue to be made available to existing and new Academies as long as it aligns with customer needs and certification requirements.

Availability

Q. When will the CCNA-A and CCNA-B curricula be available for teaching?
A. The English versions of CCNA-A courses 1 and 2 and CCNA-B courses 1 and 2 will be available in the June–August 2007 timeframe. The English versions of CCNA-A courses 3 and 4 and CCNA-B courses 3 and 4 will be available in the November–December 2007 timeframe. Cisco is committed to translating the new CCNA curricula into other languages. Information about the translations that will be performed directly by Cisco will be announced in the June–August 2007 timeframe.
Q. Why are you announcing these new curricula so far in advance?

A. This announcement is well in advance of the availability date to allow Academies and instructors to consider these changes in their planning processes. We want to keep all audiences informed of planned changes as early as possible, but we are still finalizing some of the new curricula details, so some questions may not be answered in the materials that Cisco is providing at this time. We will update you with more information as it becomes available.

Q. When will Cisco Press books be available for these new CCNA courses?

A. Cisco Press® is actively working with the Cisco Networking Academy Program team to develop companion books for the new CCNA-A and CCNA-B curricula. More details on the titles and their publication dates will be announced via the Cisco Press Website as well as the Cisco Press Instructor Newsletter. To subscribe to the newsletter, visit www.ciscopress.com/newsletters.