



Ministry of cooperatives
Labour and Social Welfare



Iran Technical and Vocational
Training Organization

Deputy of training
Plan and curriculums office

Competency Training standard

Title

CCNA Security Certification

Implementing Cisco IOS Network Security (**IINS**)

Occupational group

Information Technology (IT)

International code

2513-53-106-1

Date of standard compilation: 2015/05/18

Control of board on content compilation and accreditation: Plan and curriculums office
National code: **2513-53-106-1**

Member of Specialized commission IT Curriculum development:

- Ali Mosavi: Director Manager of Iran TVTO Curriculum Development Office
- Hassan Solimany: Member of Iran TVTO IT Curriculum Development
- Sarang Ghorbanian: Member of Iran TVTO IT Curriculum Development
- Dariush Esmaeili: Member of Iran TVTO IT Curriculum Development
- Asma Karimi: Member of Iran TVTO IT Curriculum Development
- Shahram Shokofian: Manager of Iran TVTO IT Curriculum Development

Cooperator Specialized organizations for compiling the training standard:

- Iran Information Technology Development Co
- Iran Information Technology Development University
- Danesh IT Academy in Iran, Tehran (Danesh-ac.ir)

Revision Process:

- Scientific content
- According to market
- Equipment
- Tools

Plan & Curriculum Office

97, Nosrat Avenue –Tehran, Iran

Tel:+98-21-66569900-9

Fax: +98-21-66944117

E-mail:Barnamehdarci@yahoo.com

	Name & Family name	Academic document	field	Job & post	Relevant experiences	Add & Tel & Email
1	AmirHossein Khademi	B. SC	Data Center	Technical Manager	Faraz Aseman	No 81, First Floor South, Khoramshahr St, North Sohravardi St, Tehran 021-88505950
2	AliAsqar Abniki	B. SC	Service Provider	Technical Manager	Danesh IT Academy	No 85, Next to Alnabi Mosque, Nabovvat Sq, Tehran 021-77275959 09127719877
3	Vahid Askari Azad	B. SC	Network engineer	Technical Engineer	Danesh IT Academy	No 85, Next to Alnabi Mosque, Nabovvat Sq. Tehran 021-77275959 09124100252
4	Mahyar TajDini	B.SC	Network Engineer	Network Security Consultant / Auditor	Hormozgan Petro Gas Co / Satrap Net Rasha / Hormozgan TVTO	Post Box NO : 791454334 , Bandarabbass , Iran
5	Asma Karimi	B.S	Electronics Engineer	Trainer	9 Years	Post Box NO : 7916853689, Bandarabbass , Iran
6	Eisa Naderi	B.S	Computer Engineer	Trainer	11 Years	Post Box NO : 7916853689 , Bandarabbass , Iran
7	Amir BalAfkan	B.SC	Electronics Engineer	Trainer	12 Years	Post Box NO : 7916853689, Bandarabbass , Iran
8	Seyed hadi Poormand	B.S	Electronics Engineer	Trainer	13 Years	Post Box NO : 7916853689, Bandarabbass , Iran
9	Tooba Alinezhad	Associate Degree	Internet-wide networks	Education Expert	10 Years	Post Box NO : 7916853689, Bandarabbass , Iran

Definitions:

Job standard:

The characteristics ' required competencies and abilities for Efficient Performance in work environment is called "the Job standard", and sometimes “The Occupational standard”

Training standard:

The Training Map for achieving the Job’s subset Competencies.

Job title:

Is a set of Tasks and Abilities which is expected from an employed person in the defined level

Job description:

A statement covering the most important elements of a job, namely the position or title of the job, the duties, job’s relation with other jobs in a occupational field, the responsibilities, workplace conditions and required performance standards.

Course duration:

The minimum of time which is required to achieve the training objects.

Admission requirements:

The minimum of competencies and abilities which are obligatory for a potential admission.

Evaluation:

The process of collecting evidence and judgment about whether a competency is achieved or not.

Include: written examination, practical examination

Required Qualifications for Trainers:

The minimum of Trainer’s technical and vocational abilities which the trainer is required to have.

Competency:

The ability of efficient performing a duty in a variety of workplaces conditions

Knowledge:

The minimum set of facts and mental capacities which is necessary for achieving a competency. This can include science, (Mathematics, physics, chemistry or biology), technology or technical.

Skill:

The minimum coordination between mind and body for achieving an ability or competency. It normally applied to practical skills.

Attitude:

A set of emotional behaviors required for achieving a competency and can have non-technical skills and occupational ethics.

Safety:

The cases which doing or not doing something can cause harm or accident

Environmental Consideration:

A set of consideration about the act which should be done to minimize the environmental damage or pollution.

competency title:

CCNA Security Certification

competency description:

Cisco Certified Network Associate Security (CCNA Security) validates associate-level knowledge and skills required to secure Cisco networks. With a CCNA Security certification, a network professional demonstrates the skills required to develop a security infrastructure, recognize threats and vulnerabilities to networks, and mitigate security threats. The CCNA Security curriculum emphasizes core security technologies, the installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices, and competency in the technologies that Cisco uses in its security structure.

Course Structure

The CCNA® Security course provides a next step for individuals who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. The curriculum provides an introduction to the core security concepts and skills needed for the installation, troubleshooting, and monitoring of network devices to maintain the integrity, confidentiality, and availability of data and devices. CCNA Security includes the following features:

- Participants develop an in-depth, theoretical understanding of network security principles as well as the tools and configurations available.
- The course emphasizes the practical application of skills needed to design, implement, and support network security.
- Hands-on labs help participants develop critical thinking and complex problem-solving skills.
- Packet Tracer simulation-based learning activities promote the exploration of networking security concepts and allow participants to experiment with network behavior and ask “what if” questions.
- Innovative assessments provide immediate feedback to support the evaluation of knowledge and acquired skills.

admission requirements:

minimum degree of education: Post first year of high school
minimum physical and mental ability:-
prerequisite skills: Any Cisco CCENT, CCNA Routing and Switching

Course duration:

Course duration :40 hours

Evaluation :(%)

Exam Number	640-554
Associated Certifications	CCNA Security
Duration	90 minutes (55-65 questions)
Available Languages	English, Japanese
Register	Pearson VUE
Exam Policies	Read current policies and requirements
Exam Tutorial	Review type of exam questions
Required Qualifications for Trainers:	
CISCO CCNP degree holders with 2 years experiences	

competency training standard tasks	
1	Modern Network Security Threats
2	Securing Network Devices
3	Authentication, Authorization and Accounting (AAA)
4	Implementing Firewall Technologies
5	Implementing Intrusion Prevention
6	Securing the Local Area Network
7	Cryptography
8	Implementing Virtual Private Networks
9	Managing a Secure Network

*Iran Technical and Vocational
Training Organization*

Training standard
Contents analysis form

Title: Modern Network Security Threats	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Fundamental Principles of a Secure Network - Worms, Viruses and Trojan Horses - Attack Methodologies	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

High Technical and Vocational
 Training Organization

Training standard
Contents analysis form

Title: Securing Network Devices	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Securing Device Access and Files - Privilege Levels and Role-Based CLI - Monitoring Devices - Using Automated Features	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

High Technical and Vocational
 Training Organization

Training standard
Contents analysis form

Title: Authentication, Authorization and Accounting (AAA)	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Purpose of AAA - Configuring Local AAA - Configure Server-Based AAA	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Iran Technical and Vocational Training Organization

Training standard
Contents analysis form

Title: Implementing Firewall Technologies	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Access Control Lists - Firewall Technologies - Context-Based Access Control - Zone-Based Policy Firewall	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

*Iran Technical and Vocational
Training Organization*

Training standard
Contents analysis form

Title: Implementing Intrusion Prevention	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - IPS Technologies - Implementing IPS	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Iran Technical and Vocational Training Organization

Training standard
Contents analysis form

Title: Securing the Local Area Network	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Endpoint Security Considerations - Layer 2 Security Considerations - Wireless, VoIP and SAN Security Considerations - Configuring Switch Security - SPAN and RSPAN	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

High Technical and Vocational
 Training Organization

Training standard
Contents analysis form

Title: Cryptography	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Cryptographic Services - Hashes and Digital Signatures - Symmetric and Asymmetric Encryption	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

High Technical and Vocational
 Training Organization

Training standard
Contents analysis form

Title: Implementing Virtual Private Networks	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - VPNs - IPsec VPN Components and Operation - Implementing Site-to-Site IPsec VPNs - Implementing a Remote Access VPN - Implementing SSL VPNs	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Iran Technical and Vocational Training Organization

Training standard
Contents analysis form

Title: Managing a Secure Network	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Secure Network Lifecycle - Self-Defending Network - Building a Comprehensive Security Policy	Determined by the instructor			From CISCO
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Equipment & Tools & Materials & Resources (books, site, software...) form

*Required quantity for each 15 Trainees

From CISCO