



معاونت پژوهش، برنامهریزی و سنجش مهارت دفتر پژوهش، طرح و برنامهریزی درسی

## استاندارد آموزش شایستگی

## CompTIA Network+

## گروه شغلی

## فناوري اطلاعات

کد ملی آموزش شایستگی

٢	۵	۲	٣	۴	٠	۵	٣	٠	۵	٩	٠	٣	۴	١
I	SCC	)-+,	٨	سطح مهارت	وه	اسه گر	شنا	غل	اسه ش	شنا		شناسه ایستگر		نسخه

Y011-1..

تاریخ تدوین استاندارد: ۹۳/۴/۱





## Deputy of training Plan and curriculums office

## Competency Training standard

Title
CompTIA Network+

# Toccupational group Information Technology(IT)

**International code** 

2511/100

Date of standard compilation: 2013/15/12

Control of board on content compilation and accreditation: Plan and curriculums office

National code: 2511/100

#### Member of Specialized commission IT Curriculum development:

- -Shahram Shokofian: Manager of Iran TVTO IT Curriculum Development
- -Elham Tajfar: Member of Iran TVTO IT Curriculum Development
- -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

#### Cooperator Specialized organizations for compiling the training standard:

- Iran Information Technology Development Co
- Iran Information Technology Development University
- -Aptech Computer Education in Iran

#### **Revision Process:**

- Scientific content Conical and ocational
- According to market raining Organization
- 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
1	Sarang Ghorbanian	M.Sc.	IT&ICT	Manager	University of Applied Science and Technology
2	Hassan Solimany	B.Sc	IT&ICT	Manager	Iran Information Technology Development Co
3	Dariush Esmaeili	M.Sc.	IT&ICT	Manager	University of Applied Science and Technology
4	Mojtaba Kateb	M.Sc.	IT&ICT	Manager	Iran Information Technology Development Co
5	Yaghoob Poorasad	Ph.D.	т&іст 1 <i>ап</i>	Manager	University of Applied Science and Technology
6	Amirreza Ghazipour	ning (	IT&ICT	Instructor	Iran Information Technology Development Co
7	Amirhossein Rahimi Dadgar	B.Sc	IT&ICT	Instructor	Iran Information Technology Development Co

#### **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 wetter 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:

#### CompTIA Network+

#### competency description:

The CompTIA Network+ certification is the sign of a qualified networking professional.

The exam covers network technologies, installation and configuration, media and topologies, management, and security. Candidate job roles include network administrator, network technician, network installer, help desk technician and IT cable installer.

Upon completion of this course, students will be able to:

- Identify the basic components of network theory.
- Identify the major network communications methods.
- Identify network data delivery methods.
- List and describe network media and hardware components.
- Identify the major types of network implementations.
- Identify the components of a TCP/IP network implementation.
- List the major services deployed on TCP/IP networks.
- Identify characteristics of a variety of network protocols.
- Identify the components of a LAN implementation.
- Identify the components of a WAN implementation.
- Identify major issues and technologies in network security.
- Identify the components of a remote network implementation.
- Identify major issues and technologies in disaster recovery.
- Identify major data storage technologies and implementations.
- Identify the primary network operating systems.
- Identify major issues, models, tools, and techniques in network troubleshooting.

#### admission requirements:

minimum degree of education: Post first year of high school minimum physical and mental ability:-

prerequisite skills: CompTIA A+ certification and nine months networking experience

#### **Course duration:**

Course duration: 30 hours

#### **Evaluation**:(%)

Test Details		ition
Number of questions	Maximum of 100 questions	
Type of questions	Multiple choice and performance-based	
Length of test	90 minutes	
Passing score	720 (on a scale of 100-900)	
Recommended experience	CompTIA A+ certification and nine months networking experience	
Languages	English, Japanese, German, Simplified Chinese, Korean, Spanish, Traditional Chinese	
Exam codes	N10-005 JK0-019 (for CompTIA Academy Partners only)	

#### **Required Qualifications for Trainers:**

CompTIA Network+ degree holders with 2 years experience

#### competency training standard

#### tasks

Row	Title
1	Network basics
2	Wired computer-to-computer connections
3	Network-to-network connections
4	Wired internetworking devices
5	Wired communication standards
6	Wireless networking
7	Security threats and mitigation
8	Security practices
9	Network access control
10	Monitoring
11	Troubleshooting

# Iran Technical and Vocational Training Organization

### Training standard

Contents analysis form

	time			
Title:	theoretical	practical	total	
Network basics	Determined	by the inst	ructor	
Knowledge ,skill ,attitude ,safety, Environmen	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determ	nined by t	he	From <b>CompTIA</b>
Network concepts	ins	structor		
Network architectures				
The OSI model	31			
	8.1	1		
Attitude:			7/	
Speed and accuracy in doing the right thing				
Health & Safety:				
Compliance with safety protection in the wo	orkplace	dT	00	cational
Environmental Consideration:	)rge	miz	ai	tion
Compliance with environmental protection				

Title:	time			
Wired computer-to-computer	theoretical	practical	total	
connections	Determined	by the instru	ictor	
Knowledge ,skill ,attitude ,safety, Enviro	nmental Con	sideration		Equipments ,tools, materials ,books
Knowledge and Skill:	Determ	nined by the	e	From CompTIA
Wired network connections	ins	structor		
Network interface cards and modems				
Attitude:				
Speed and accuracy in doing the right thi	ng			
	2 7 1			
	45/		/	
Health & Safety:				/
Compliance with safety protection in the	workplace			
	-			
Environmental Consideration:	ıl an	dT	0 C	ational
Compliance with environmental protection	on			
Training	Orgi	aniz	at	ion

	time			
Title: Network-to-network connections	theoretical	practical	total	
Network-to-network connections	Determined	by the instru	ictor	
Knowledge ,skill ,attitude ,safety, Enviro	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determ	nined by the	e	From CompTIA
Network-to-network connection	ins	structor		
components				
LAN wiring				
LAN wiring tests				
Attitude:				
Speed and accuracy in doing the right thi	ng		\\	
Health & Safety:			/	
Compliance with safety protection in the	workplace			
Environmental Consideration:	7	7 T	-	,
Compliance with environmental protection	on an	a +	OC	ational
T	0	+		+
1 หลาทาท ฮ	$(Jr\sigma_{l})$	am7	711	1011

	time			
Title: Wind internetworking devices	theoretical	practical	total	
Wired internetworking devices	Determined	by the instru	ıctor	
Knowledge ,skill ,attitude ,safety, Environ	nmental Cons	sideration		Equipments ,tools, materials ,books
Knowledge and Skill:	Determ	nined by th	e	From CompTIA
Basic internetworking devices	ins	structor		
Specialized internetworking devices				
		$\rightarrow \leftarrow$		
Attitude:				
Speed and accuracy in doing the right thin	ng			
Health & Safety:			/	
Compliance with safety protection in the	workplace			
Environmental Consideration: Compliance with environmental protection	nl an	dT'	0 C	ational
Tagining	Aug.	orain	· / 1 +	1011
1 / (11/11/19)	U///97	IFIIZ	-(-1.1)	1.( ) f 1.

	time			
Title:	theoretical	practical	total	
Wired communication standards	Determined	by the instru	ictor	
Knowledge ,skill ,attitude ,safety, Enviro	nmental Con	sideration		Equipments ,tools, materials ,books
Knowledge and Skill:	Detern	nined by the	e	From CompTIA
The TCP/IP protocol suite	ins	structor		
TCP/IP				
DHCP servers				
		1		
Attitude:				
Speed and accuracy in doing the right thi	ng			
Health & Safety:			/	
Compliance with safety protection in the	workplace			/
Environmental Consideration:	7	7 T	-	, . 7
Compliance with environmental protection	0 C	ational		
T	_	+		
1 หลาทาท 🗸	$(Jr\sigma_{l}$	$qm_{17}$	711	1011

	time			
Title:	theoretical	practical	total	
Wireless networking	Determined	l by the instru	ictor	
Knowledge ,skill ,attitude ,safety, Enviro	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determ	nined by th	e	From CompTIA
Wireless network devices	ins	structor		
Wireless networking standards				
Wireless configuration				
Attitude:	731			
Speed and accuracy in doing the right thi	ng		11	
Health & Safety:		7/5		
Compliance with safety protection in the	workplace			
Environmental Consideration:	-			
Compliance with environmental protection	on/ an	a 1	00	ational
T	<u> </u>	+		*
1 หลาทาท 🗸	(IVO)	OM7	TII	1011

	time			
Title:	theoretical	practical	total	
Security threats and mitigation	Determined	by the instru	ictor	
Knowledge ,skill ,attitude ,safety, Enviro	Equipments ,tools, materials ,books			
Knowledge and Skill:	Determ	nined by the	e	From CompTIA
Security threats	ins	structor		
Threat mitigation				
		1		
Attitude:				
Speed and accuracy in doing the right thi	ng			
Health & Safety:		7/7	/	
Compliance with safety protection in the	workplace			7
Environmental Consideration:	7	7 T	-	, . 7
Compliance with environmental protection	on/ AM	a +	0 C	ational
T	0	+		+
1 หลากาก จ	$(Jr\sigma_{l})$	$qm_{17}$	101	1011

	time			
Title:	theoretical	practical	total	
Security practices	Determined	by the instru	ictor	
Knowledge ,skill ,attitude ,safety, Enviro	nmental Con	sideration		Equipments ,tools, materials ,books
Knowledge and Skill:	Determ	nined by the	e	From CompTIA
Operating systems	ins	structor		
Devices				
Attitude:				
Speed and accuracy in doing the right thi	ng		//	
Health & Safety:		7/7	/	
Compliance with safety protection in the	workplace			/
Environmental Consideration:	7	7 T	-	,
Compliance with environmental protection	on an	a 1	00	ational
T	0	+		+
1 หลาทาก จ	$(Jr\sigma_{l})$	$qm_{17}$	101	1011

	time					
Title:	theoretical	practical	total			
Network access control	Determined	by the instru				
Knowledge ,skill ,attitude ,safety, Enviro	Equipments ,tools, materials ,books					
Knowledge and Skill:	Determ	nined by th	From CompTIA			
Authentication	ins	structor				
Public key cryptography						
Remote access						
Wireless security						
Attitude:						
Speed and accuracy in doing the right thing						
Health & Safety:						
Compliance with safety protection in the workplace						
Environmental Consideration: Compliance with environmental protection	ont an	dT	00	ational		
Training	Oro	anis	711	ion		

	time					
Title:	theoretical	practical	total			
Monitoring	Determined	by the instru				
Knowledge ,skill ,attitude ,safety, Enviro	Equipments ,tools, materials ,books					
Knowledge and Skill:	Detern	nined by the	e	From CompTIA		
Monitoring resources	ins	structor				
Event Viewer						
		1				
Attitude:	731					
Speed and accuracy in doing the right thi						
Health & Safety:						
Compliance with safety protection in the workplace						
Environmental Consideration:	7	7 T	-	,		
Compliance with environmental protection	on an	a +	OC	ational		
T	$\overline{a}$	+		+		
1 หลาทาก อ	( Iro	91117	777	1011		

	time					
Title:	theoretical	practical	total			
Troubleshooting	Determined	by the instru				
Knowledge ,skill ,attitude ,safety, Enviro	Equipments ,tools, materials ,books					
Knowledge and Skill:	Detern	nined by the	From CompTIA			
Troubleshooting basics	in	structor				
Troubleshooting the network						
Troubleshooting scenarios						
		1				
Attitude:	731					
Speed and accuracy in doing the right thing						
Health & Safety:						
Compliance with safety protection in the workplace						
Environmental Consideration:						
Compliance with environmental protection						
Training	Orgi	aniz	at	ion		

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

#### From CompTIA

<sup>\*</sup>Required quantity for each 15 Trainees