Deputy of training

Plan and curriculums office

Competency Training standard

Title

Cisco Certified Network Professional

(CCNP Routing)

Occupational group

Information Technology (IT)

International code

۲۵۱۳-۵۳-۱۰۳-۱

Date of standard compilation: ۲۰۱۵/۰۵/۱۸

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Revision Process:

- Scientific content
- According to market
- Equipment
- Tools

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٦						

<u>Definitions</u>:

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:

Cisco Certified Network Professional (CCNP Routing)

competency description:

Cisco Certified Network Professional (CCNP) Routing and Switching certification validates the ability to plan, implement, verify and troubleshoot local and wide-area enterprise networks and work collaboratively with specialists on advanced security, voice, wireless and video solutions. The CCNP Routing and Switching certification is appropriate for those with at least one year of networking experience who are ready to advance their skills and work independently on complex network solutions. Those who achieve CCNP Routing and Switching have demonstrated the skills required in enterprise roles such as network engineer, support engineer, systems engineer or network technician. The routing and switching protocol knowledge from this certification will provide a lasting foundation as these skills are equally relevant in the physical networks of today and the virtualized network functions of tomorrow.

Course Content

ROUTE v٢.٠ includes major updates and follows an updated blueprint. However, note that this course does not cover all items listed on the blueprint. Some older topics have been removed or simplified, while several new IPv٦ routing topics have been added. Course content has been adapted to Cisco IOS Software Release ١٥ and technically updated. Course also introduces new type of labs, called discovery labs. Discovery labs are instructor guided lab through which student explores new topics in an interactive way. All labs are developed only as virtual labs. To get the full course experience, you should cover everything, including Introduction, Discovery labs, Summary, and Module Self-Check.

admission requirements:

minimum degree of education: Post first year of high school
minimum physical and mental ability:-
prerequisite skills: Cisco CCNA Routing and Switching certification, The CCNP Routing and Switching certification is appropriate for those with at least one year of networking experience

Course duration:

Course duration : ٤٠ hours

Evaluation :(%)

300-101 ROUTE
Implementing Cisco IP Routing (ROUTE)

Exam Number:	300-101
Associated Certifications:	CCNP Routing and Switching and CCDP
Duration:	120 minutes (45 - 55 questions)
Available Languages:	English
Register for Exam:	Pearson VUE
Exam Policies:	Read current policies and requirements
Exam Tutorial:	Review type of exam questions
Register for Course:	ROUTE

Required Qualifications for Trainers:

CISCO CCNP degree holders with ٢ years experiences

competency training standard tasks	
١	Network Principles
٢	Layer ٢ Technologies
٣	Layer ٣ Technologies
٤	VPN Technologies
٥	Infrastructure Security
٦	Infrastructure Services
٧	
٨	
٩	
١٠	
١١	
١٢	

Training standard
Contents analysis form

Title:	time			
	theoretical	practical	total	
Network Principles	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: Identify Cisco Express Forwarding concepts general network challenges IP operations TCP operations UDP operations	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				

Training standard
Contents analysis form

Title: **Layer ۲ Technologies**	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: PPP Frame Relay	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				

Training standard
Contents analysis form

Title: **Layer ٣ Technologies**	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: IPv٤ addressing and subnetting IPv٦ addressing and subnetting static routing default routing routing protocol types administrative distance VRF lite redistribution between any routing protocols or routing sources policy-based routing ROUTE maps loop prevention mechanisms RIPv٢ EIGRP OSPF network types, area types, and router types BGP eBGP	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				

Training standard
Contents analysis form

Title:	time			
VPN Technologies	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: GRE DMVPN (single hub) Easy Virtual Networking (EVN)	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				

Training standard
Contents analysis form

Title: **Infrastructure Security**	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: IOS AAA using local database device security using IOS AAA with TACACS+ and RADIUS device access control router security 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				

Training standard
Contents analysis form

Title: **Infrastructure Services**	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill:	Determined by the instructor			From **CISCO**
device management SNMP Logging Network Time Protocol (NTP) IPv٤ and IPv٦ DHCP IPv٤ Network Address Translation (NAT) IPv٦ NAT SLA architecture IP SLA tracking objects Cisco NetFlow				
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 ١٥ Trainees

From CISCO