



### QUALIFICATIONS PACK - NATIONAL OCCUPATIONAL STANDARDS FOR IT-BPM INDUSTRY

### What are National Occupational Standards (NOS)?

NOS describe what individuals need to do, know and understand in order to carry out a particular job role or function

NOS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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### Introduction

### **Qualifications Pack-Web Developer**

SECTOR: IT-ITeS

SUB-SECTOR: IT Services

**OCCUPATION:** Application Development

REFERENCE ID: SSC/Q0503

ALIGNED TO: NCO-2015/ 2513.0101

Web Developer in the IT-ITeS Industry is also known as a Web Designer.

**Brief Job Description:** Individuals at this job are responsible for designing and maintaining web-based applications that include static and dynamic content. This includes the design, layout and coding of a website. They may work standalone or along with application/functional developers as part of the overall solution that includes a web based component.

**Personal Attributes:** This job may require the individual to work independently or in teams. The individual should be result oriented. The individual should also be able to demonstrate skills for communication, creative and logical thinking.





Qualifications Pack Code		SSC/Q0503	
Job Role	V This job role is applicable in	Veb Developer both national and int	ernational scenarios
Credits (NSQF)	TBD	Version number	1.0
Sector	IT-ITeS	Drafted on	30/04/2013
Sub-sector	IT Services	Last reviewed on	31/03/2018
Occupation	Application Development	Next review date	31/03/2019
NSQC Clearance on	19/05/2015		

Job Role	<b>Web Developer</b> (Web Designer)
Role Description	Individuals at this job are responsible for designing and maintaining web-based applications that include static and dynamic content. This includes the design, layout and coding of a website.
NSQF level	5
Minimum Educational Qualifications	Graduate degree/ diploma in web design/ media design or any other related field
Maximum Educational Qualifications	Masters Degree in Media Design
Training (Suggested but not mandatory)	Relevant animation and graphics courses/ certifications/ trainings
Minimum Job Entry Age	18 years
Experience	0-2 years of work experience/internship in web designing/ development
Applicable National Occupational Standards (NOS)	<ul> <li>Compulsory:</li> <li>1. <u>SSC/N0501 (Contribute to the design of software products and applications)</u></li> <li>2. <u>SSC/N0503 (Develop media content and graphic designs for software products and applications)</u></li> <li>3. <u>SSC/N9001 (Manage your work to meet requirements)</u></li> <li>4. <u>SSC/N9002 (Work effectively with colleagues )</u></li> <li>5. <u>SSC/N9003 (Maintain a healthy, safe and secure working environment)</u></li> <li>6. <u>SSC/N9004 (Provide data/information in standard formats)</u></li> <li>7. <u>SSC/N9005 (Develop your knowledge, skills and competence)</u></li> <li>Optional: Not Applicable</li> </ul>
Performance Criteria	As described in the relevant NOS units





### **Glossary of Key Terms**

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Sub-functions	Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an OS unit, which can be denoted with either an ' <b>O</b> ' or an ' <b>N</b> '.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have





	& ENTREPRENEURSHIP
	a critical impact on the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Helpdesk	Helpdesk is an entity to which the customers will report their IT problems. IT Service Helpdesk Attendant is responsible for managing the helpdesk.
Keywords /Terms	Description
IT-ITeS	Information Technology - Information Technology enabled Services
BPM	Business Process Management
вро	Business Process Outsourcing
КРО	Knowledge Process Outsourcing
LPO	Legal Process Outsourcing
IPO	Information Process Outsourcing
BCA	Bachelor of Computer Applications
B.Sc.	Bachelor of Science
OS	Occupational Standard(s)
NOS	National Occupational Standard(s)
QP	Qualifications Pack
UGC	University Grants Commission
MHRD	Ministry of Human Resource Development
MoLE	Ministry of Labour and Employment
NVEQF	National Vocational Education Qualifications Framework
NVQF	National Vocational Qualifications Framework
NSQF	National Skill Qualification Framework

Acronyms



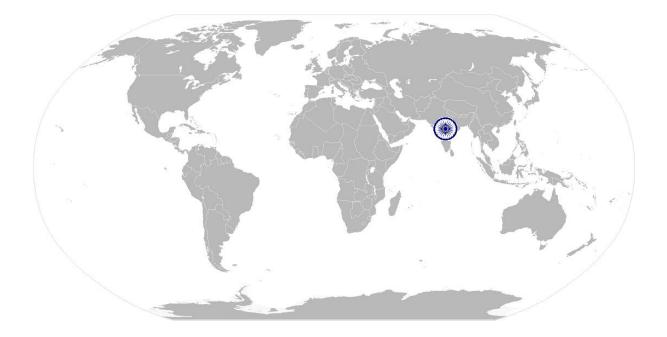






Contribute to the design of software products and applications

# National Occupational Standard



**Overview** 

This unit is about contributing to the design of software products and applications where both the business impact and technical complexity are low.







SSC/N0501

Contribute to the design of software products and applications

Unit Code	SSC/N0501
Unit Title (Task)	Contribute to the design of software products and applications
Description	This unit is about contributing to the design of software products and applications
	where both the business impact and technical complexity are low.
Scope	This unit/task covers the following:
	Appropriate people:
	Ine manager
	• peers
	subject matter experts
	Software Requirements Specification includes:
	functional requirements
	non-functional requirements
	High Level Design includes:
	technical solution selected and its rationale
	assumptions
	• constraints
	dependencies
	interfaces
	Requirements where:
	business impact is low
	technical complexity is low
Performance Criteria	(PC) w.r.t. the Scope
	To be competent, you must be able to:
	PC1. check your understanding of the Business Requirements Specification
	(BRS)/User Requirements Specification (URS) with appropriate people
	PC2. check your understanding of the Software Requirements Specification (SRS)
	with appropriate people
	PC3. check your understanding of <b>High Level Design</b> (HLD) with <b>appropriate</b>
	people
	PC4. design basic programming structures to implement functionality in line with
	requirements defined in BRS/URS, SRS and HLD
	PC5. review your designs with <b>appropriate people</b>
	PC6. analyze inputs from <b>appropriate people</b> to identify, resolve and record design
	defects and inform future designs
	PC7. document your designs using standard templates and tools
	PC8. comply with your organization's policies, procedures and guidelines when
	contributing to the design of software products and applications









### SSC/N0501 Contribute to the design of software products and applications

Knowledge and Unders	standing (K)
A. Organizational	You need to know and understand:
Context	KA1. your organization's policies, procedures and guidelines for designing software
(Knowledge of the	products and applications and your role and responsibilities in relation to this
company/	KA2. your organization's knowledge base and how to access and update this
organization and	KA3. the scope of work to be carried out and the importance of keeping within
its processes)	these boundaries
	KA4. who you may need to involve to provide feedback to your designs
	KA5. the importance of collating feedback on your designs
	KA6. how to analyze and use feedback to improve your designs
	KA7. who you may need to involve to provide feedback on your designs
	KA8. standard templates and tools available and how to use these to document
	your designs
	KA9. the approval process for designs of software products and applications
B. Technical	You need to know and understand:
Knowledge	KB1. how to interpret and follow different design specifications, including:
	Business Requirements Specification (BRS)
	User Requirements Specification (URS)
	Software Requirements Specification (SRS)
	High Level Design (HLD)
	KB2. how to design basic program structures
	KB3. how to design software products
	KB4. how to design software applications
	KB5. different sources of information for help to design software products and specifications
	KB6. the range of equipment used to design software products and applications
	KB7. common design defects and how to resolve these
	KB8. current practice in the infrastructure design of software products and applications
	KB9. the range of activities involved in designing different software products and applications
	KB10. how to test new products and applications are fit for purpose
	KB11. implications new products and applications may have on business processes
	and business infrastructure
Skills (S)	
A. Core Skills/	Writing Skills
Generic Skills	You need to know and understand how to:
	SA1. communicate with colleagues in writing







SSC/N0501

### Contribute to the design of software products and applications

	Reading Skills
	You need to know and understand how to:
	SA2. read instructions, guidelines, procedures, rules and service level agreements
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to:
	SA3. listen effectively and orally communicate information
B. Professional Skills	Decision Making
	You need to know and understand how to:
	SB1. make a decision on a suitable course of action
	Plan and Organize
	You need to know and understand how to:
	SB2. plan and organize your work to achieve targets and deadlines
	Customer Centricity
	You need to know and understand how to:
	SB3. check that your own work meets customer requirements
	SB4. meet and exceed customer expectations
	Problem Solving
	You need to know and understand how to: 🧐
	SB5. apply problem-solving approaches in different situations
	Analytical Thinking
	You need to know and understand how to:
	SB6. configure data and disseminate relevant information to others
	SB7. analyze data and activities
	Critical Thinking
	You need to know and understand how to:
	SB8. apply balanced judgments to different situations
	Attention to Detail
	You need to know and understand how to:
	SB9. check your work is complete and free from errors
	SB10. get your work checked by peers
	Team Working
	You need to know and understand how to:
	SB11. work effectively in a team environment
C. Technical Skills	You need to know and understand how to:
	SC1. use information technology effectively to input and/or extract data accurately
	SC2. agree objectives and work requirements
	SC3. keep up to date with changes, procedures and practices in your role





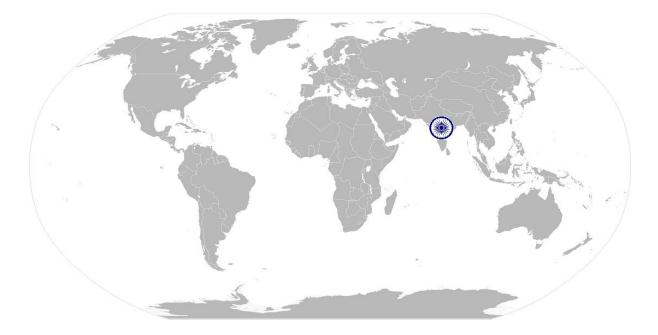




### SSC/N0501 Contribute to the design of software products and applications

**NOS Version Control** 

NOS Code		SSC/N0501	
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019





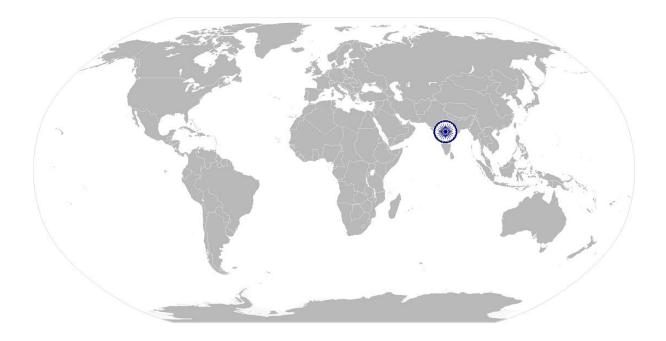




SSC/N0503

Develop media content and graphic designs for software products and applications

## National Occupational Standard



**Overview** 

This unit is about developing media content and producing graphic designs to enhance to usability of software products and applications where their business impact and technical complexity is low.







SSC/N0503

### Develop media content and graphic designs for software products and

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4		
	Unit Code	SSC/N0503
	Unit Title (Task)	Develop media content and graphic designs for software products and applications
	Description	This unit is about developing media content and producing graphic designs to enhance to usability of software products and applications where their business impact and technical complexity is low.
	Scope	This unit/task covers the following: Appropriate people: Iline manager peers subject matter experts Software Requirements Specification includes: functional requirements non-functional requirements High Level Design includes: technical solution selected and its rationale assumptions constraints dependencies interfaces Low Level Design includes: programming structures media design standards graphic design standards checklists Requirements where: business impact is low
	Performance Criteria (I	<ul> <li>technical complexity is low</li> <li>C) writ the Scope</li> </ul>
		To be competent, you must be able to:         PC1.       check your understanding of the Business Requirements Specification (BRS),         Software Requirements Specification (SRS), High Level Design (HLD) and         Low Level Design (LLD) with appropriate people         PC2.       access reusable components, media and graphical packages and tools from
		your organization's knowledge base PC3. convert <b>requirements</b> into media content and graphic designs, leveraging reusable components where available
		PC4. review media content and graphic designs with <b>appropriate people</b> and







	analyze their feedback
	PC5. record any defects and corrective actions taken to inform future work
	PC6. rework media content and graphic designs, incorporating feedback
	PC7. submit media content timely and graphic designs for approval by <b>appropriate</b>
	people
	PC8. update your organization's knowledge base with your experiences of the
	media content and graphic designs developed
	PC9. comply with your organization's policies, procedures and guidelines when
	developing media content and graphic designs for software products and
	applications
A. Organizational	You need to know and understand:
Context	KA1. your organization's policies, procedures and guidelines for developing media
(Knowledge of the	content and graphic designs for software products and applications, and you
company/	role and responsibilities in relation to this
organization and	KA2. the scope of work to be carried out and the importance of keeping within
its processes)	these boundaries
	KA3. your organization's knowledge base and how to access and update this
	KA4. standard templates and tools available and how to use these to document
	your media content and graphic designs
	KA5. the importance of collating feedback on your media content and graphic
	designs
	KA6. how to analyze and use feedback to improve your media content and graphic
	designs
	KA7. who you may need to involve to provide feedback on your media content
	and graphic designs
	KA8. how recording corrective actions for problems and defects can improve
	future designs
	KA9. who needs to approve media content and graphic designs
	KA10. different sources of information for help to develop media content and
	graphic designs
B. Technical	You need to know and understand:
Knowledge	KB1. how to interpret and follow different design specifications, including:
	Business Requirements Specification (BRS)
	User Requirements Specification (URS)
	Software Requirements Specification (SRS)
	High Level Design (HLD)
	KB2. the process for converting design specifications into media content and







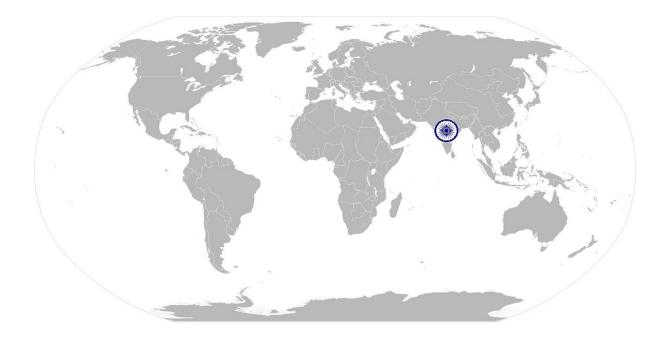
	elop media content and graphic designs for software products and lications	
	graphic designs	
	KB3. current practice in developing media content and graphic designs	
	KB4. how to develop media content and graphic designs	
	KB5. how to determine whether components are suitable for re-use	
	KB6. the different types of problems that may occur and how these may be	
	resolved	
	KB7. how to test media content and graphic designs are fit for purpose	
Skills (S)		
A. Core Skills/	Writing Skills	
Generic Skills	You need to know and understand how to:	
	SA1. communicate with colleagues in writing	
	Reading Skills	
	You need to know and understand how to:	
	SA2. read instructions, guidelines, procedures, rules and service level agreements	
	Oral Communication (Listening and Speaking skills)	
	You need to know and understand how to:	
	SA3. listen effectively and orally communicate information	
B. Professional Skills	Decision Making	
	You need to know and understand how to:	
	SB1. make a decision on a suitable course of action	
	Plan and Organize	
	You need to know and understand how to:	
	SB2. plan and organize your work to achieve targets and deadlines	
	Customer Centricity	
	You need to know and understand how to:	
	SB3. check that your own work meets customer requirements	
	SB4. meet and exceed customer expectations	
	Problem Solving	
	You need to know and understand how to:	
	SB5. apply problem-solving approaches in different situations	
	Analytical Thinking	
	You need to know and understand how to:	
	SB6. configure data and disseminate relevant information to others	
	SB7. analyze data and activities	
	Critical Thinking	
	You need to know and understand how to:	
	SB8. apply balanced judgments to different situations	
	Attention to Detail	







SSC/N0503 Develop media content and graphic designs for software products and applications			
		You need to know and understand how to:	
		SB9. check your work is complete and free from errors	
		SB10. get your work checked by peers	
		Team Working	
		You need to know and understand how to:	
		SB11. work effectively in a team environment	
С.	Technical Skil	Is You need to know and understand how to:	
		SC1. use information technology effectively to input and/or extract data accurately	
		SC2. agree objectives and work requirements	
		SC3. keep up to date with changes, procedures and practices in your role	





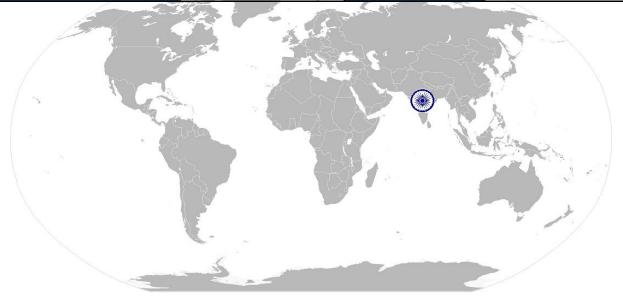




### SSC/N0503 Develop media content and graphic designs for software products and applications

**NOS Version Control** 

NOS Code	SSC/N0503		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
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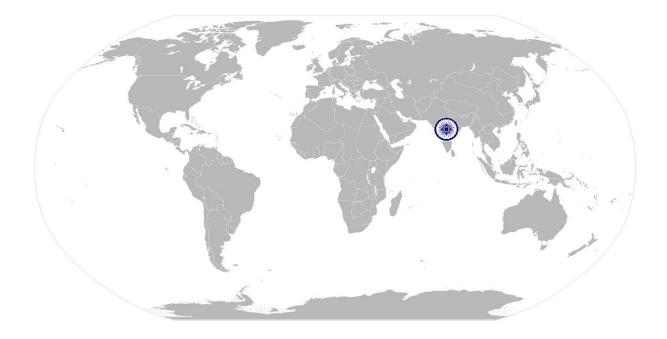






Manage your work to meet requirements

## National Occupational Standard



**Overview** 

This unit is about planning and organizing your work in order to complete it to the required standards on time









#### Manage your work to meet requirements SSC/N9001 **Unit Code** SSC/N9001 Unit Title Manage your work to meet requirements (Task) Description This unit is about planning and organizing your work in order to complete it to the required standards on time. Scope This unit/task covers the following: Work requirements: • activities (what you are required to do) deliverables (the outputs of your work) quantity (the volume of work you are expected to complete) • standards (what is acceptable performance, including compliance with Service Level Agreements) timing (when your work needs to be completed) Appropriate people: line manager the person requesting the work members of the team/department members from other teams/departments **Resources:** equipment materials information Performance Criteria (PC) w.r.t. the Scope To be competent on the job, you must be able to: PC1. establish and agree your work requirements with appropriate people PC2. keep your immediate work area clean and tidy PC3. utilize your time effectively PC4. use resources correctly and efficiently PC5. treat confidential information correctly PC6. work in line with your organization's policies and procedures PC7. work within the limits of your job role PC8. obtain guidance from **appropriate people**, where necessary PC9. ensure your work meets the agreed requirements Knowledge and Understanding (K) A. Organizational You need to know and understand: your organization's policies, procedures and priorities for your area of work KA1. Context and your role and responsibilities in carrying out your work (Knowledge of the KA2. limits of your responsibilities and when to involve others company/ KA3. your specific work requirements and who these must be agreed with organization and KA4. the importance of having a tidy work area and how to do this its processes)







SSC/N9001	Manage your work to meet requirements			
	KA6. your organization's policies and procedures for dealing with confidential			
	information and the importance of complying with these			
	KA7. the purpose of keeping others updated with the progress of your work			
	KA8. who to obtain guidance from and the typical circumstances when this may be			
	required			
	KA9. the purpose and value of being flexible and adapting work plans to reflect			
	change			
B. Technical	You need to know and understand:			
Knowledge	KB1. the importance of completing work accurately and how to do this			
	KB2. appropriate timescales for completing your work and the implications of not			
	meeting these for you and the organization			
	KB3. resources needed for your work and how to obtain and use these			
Skills (S)				
A. Core Skills/	Writing Skills			
Generic Skills	You need to know and understand how to:			
	SA1. complete accurate work with attention to detail			
	Reading Skills			
	You need to know and understand how to:			
	SA2. read instructions, guidelines, procedures, rules and service level agreements			
	Oral Communication (Listening and Speaking skills)			
	You need to know and understand how to:			
SA3. ask for clarification and advice from line managers				
	SA4. communicate orally with colleagues			
B. Professional Skills	Decision Making			
	You need to know and understand how to:			
	SB1. make a decision on a suitable course of action			
	Plan and Organize			
	You need to know and understand how to:			
	SB2. plan and organize your work to achieve targets and deadlines			
	SB3. agree objectives and work requirements			
	Customer Centricity			
	You need to know and understand how to:			
	SB4. deliver consistent and reliable service to customers			
	SB5. check that your own work meets customer requirements			
	Problem Solving			
	You need to know and understand how to:			
	SB6. refer anomalies to the line manager			
	SB7. seek clarification on problems from others			
	Analytical Thinking			







SSC/N9001	Manage your work to meet requirements		
	You need to know and understand how to:		
	SB8. provide relevant information to others		
	SB9. analyze needs, requirements and dependencies in order to meet your work		
	requirements		
	Critical Thinking		
	You need to know and understand how to:		
	SB10. apply judgments to different situations		
	Attention to Detail		
	You need to know and understand how to:		
	SB11. check your work is complete and free from errors		
	SB12. get your work checked by peers		
	Team Working		
	You need to know and understand how to:		
	SB13. work effectively in a team environment		
C. Technical Skills	You need to know and understand how to:		
	SC1. use information technology effectively, to input and/or extract data		
	accurately		
	SC2. identify and refer anomalies in data		
	SC3. store and retrieve information		
	SC4. keep up to date with changes, procedures and practices in your role		





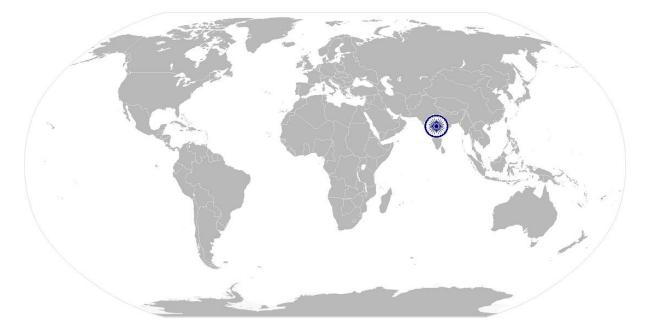




SSC/N9001 NOS Version Control

### Manage your work to meet requirements

NOS Code	SSC/N9001		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
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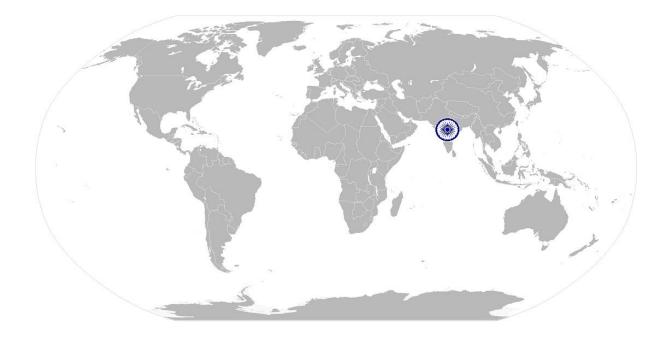




Work effectively with colleagues



## National Occupational Standard



**Overview** 

This unit is about working effectively with colleagues, either in your own work group or in other work groups within your organization.



SSC/N9002



Work effectively with colleagues



## N.S.D.C National Skill Development Corporation

Transforming the skill landscape

# Applicable NOS Unit

Unit Code	SSC/N9002	
Unit Title	Work offectively with colleagues	
(Task)	Work effectively with colleagues	
Description	This unit is about working effectively with colleagues, either in your own work group	
	or in other work groups within your organization.	
Scope	This unit/task covers the following:	
	Colleagues:	
	Iine manager	
	<ul> <li>members of your own work group</li> </ul>	
	<ul> <li>people in other work groups in your organization</li> </ul>	
	Communicate:	
	• face-to-face	
	by telephone	
Deufeure en ce Cuiterie /r	• in writing	
Performance Criteria (F		
	To be competent, you must be able to:	
	PC1. communicate with <b>colleagues</b> clearly, concisely and accurately	
	PC2. work with <b>colleagues</b> to integrate your work effectively with them	
	PC3. pass on essential information to <b>colleagues</b> in line with organizational requirements	
	PC4. work in ways that show respect for <b>colleagues</b>	
	PC5. carry out commitments you have made to <b>colleagues</b>	
	PC6. let colleagues know in good time if you cannot carry out your commitments,	
	explaining the reasons	
	PC7. identify any problems you have working with <b>colleagues</b> and take the initiative	
	to solve these problems	
	PC8. follow the organization's policies and procedures for working with <b>colleagues</b>	
Knowledge and Unders		
A. Organizational	You need to know and understand:	
Context	KA1. your organization's policies and procedures for working with colleagues and	
(Knowledge of the	your role and responsibilities in relation to this	
company/	KA2. the importance of effective communication and establishing good working	
organization and	relationships with colleagues	
its processes)	KA3. different methods of communication and the circumstances in which it is	
	appropriate to use these	
	KA4. benefits of developing productive working relationships with colleagues	
	KA5. the importance of creating an environment of trust and mutual respect in an	
	environment where you have no authority over those you are working with	
	KA6. where you do not meet your commitments, the implications this will have on	
	individuals and the organization	
B. Technical	You need to know and understand:	
	KB1. different types of information that colleagues might need and the importance	







	C/N9002	Work effectively with colleagues		
ľ	(nowledge	of providing this information when it is required		
		KB2. the importance of understanding problems from your colleague's perspective		
		and how to provide support, where necessary, to resolve these		
	ls (S)			
Α.	Core Skills/	Writing Skills		
	Generic Skills	You need to know and understand how to:		
		SA1. complete accurate, well written work with attention to detail		
		SA2. communicate effectively with colleagues in writing		
		Reading Skills		
		You need to know and understand how to:		
		SA3. read instructions, guidelines, procedures, rules and service level agreements		
		Oral Communication (Listening and Speaking skills)		
		You need to know and understand how to:		
		SA4. listen effectively and orally communicate information accurately		
		SA5. ask for clarification and advice from line managers		
B.	Professional Skills	Decision Making		
		You need to know and understand how to:		
		SB1. make a decision on a suitable course of action		
		Plan and Organize		
		You need to know and understand how to:		
		SB2. plan and organize your work to achieve targets and deadlines		
		Customer Centricity		
		You need to know and understand how to:		
		SB3. check that your own work meets customer requirements		
		SB4. deliver consistent and reliable service to customers		
		Problem Solving		
		You need to know and understand how to:		
		SB5. apply problem solving approaches in different situations		
		Critical Thinking		
		You need to know and understand how to:		
		SB6. apply balanced judgments to different situations		
		Attention to Detail		
		You need to know and understand how to:		
		SB7. check your work is complete and free from errors		
		SB8. get your work checked by peers		
		Team Working		
		You need to know and understand how to:		
		SB9. work effectively in a team environment		
		SB10. work effectively with colleagues and other teams		







SSC/N9002	Work effectively with colleagues		
	SB11. treat other cultures with respect		
C. Technical Skills	You need to know and understand how to:		
	SC1. identify and refer anomalies		
	SC2. help reach agreements with colleagues		
	SC3. keep up to date with changes, procedures and practices in your role		





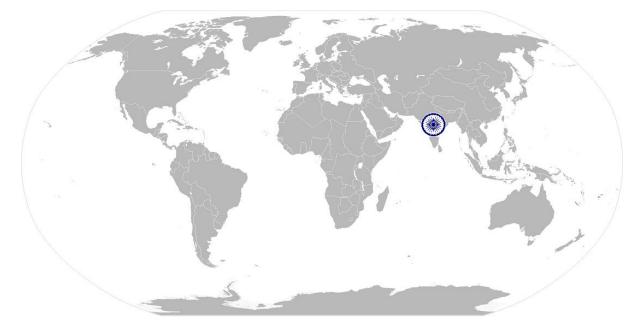




SSC/N9002 NOS Version Control

### Work effectively with colleagues

NOS Code	SSC/N9002		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



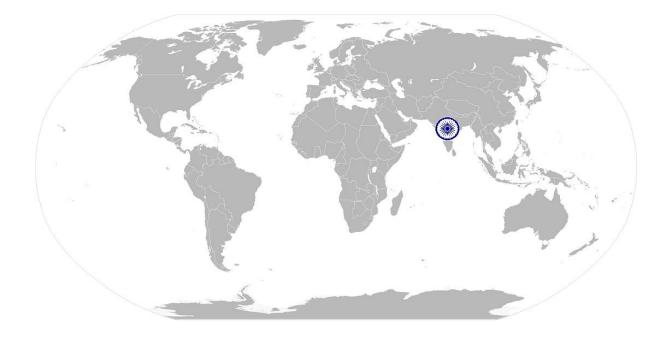






Maintain a healthy, safe and secure working environment

## National Occupational Standard



**Overview** 

This unit is about monitoring the working environment and making sure it meets requirements for health, safety and security.







SSC/N9003

### Maintain a healthy, safe and secure working environment

Unit Code	SSC/N9003		
Unit Title (Task)	Maintain a healthy, safe and secure working environment		
Description	This unit is about monitoring your working environment and making sure it meets		
	requirements for health, safety and security.		
Scope	This unit/task covers the following:		
	Emergency procedures:		
	• illness		
	accidents		
	• fires		
	other reasons to evacuate the premises		
Deufeunene Cuiterie /	breaches of security		
Performance Criteria (			
	<ul> <li>To be competent, you must be able to:</li> <li>PC1. comply with your organization's current health, safety and security policies and procedures</li> <li>PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person</li> <li>PC3. identify and correct any hazards that you can deal with safely, competently and within the limits of your authority</li> <li>PC4. report any hazards that you are not competent to deal with to the relevant person in line with organizational procedures and warn other people who may be affected</li> <li>PC5. follow your organization's emergency procedures promptly, calmly, and efficiently</li> <li>PC6. identify and recommend opportunities for improving health, safety, and security to the designated person</li> <li>PC7. complete any health and safety records legibly and accurately</li> </ul>		
Knowledge and Under			
A. Organizational	You need to know and understand:		
Context	KA1. legislative requirements and organization's procedures for health, safety and		
(Knowledge of the	security and your role and responsibilities in relation to this		
company/	KA2. what is meant by a hazard, including the different types of health and safety		
organization and	hazards that can be found in the workplace		
its processes)	KA3. how and when to report hazards		
	KA4. limits of your responsibility for dealing with hazards		
	KA5. your organization's emergency procedures for different emergency		
	situations and the importance of following these		
	KA6. the importance of maintaining high standards of health, safety and security		
	KA7. implications that any non-compliance with health, safety and security may		
	have on individuals and the organization		







SSC/N9003	Maintain a healthy, safe and secure working environment		
B. Technical Knowledge	<ul> <li>You need to know and understand:</li> <li>KB1. different types of breaches in health, safety and security and how and when to report these</li> <li>KB2. evacuation procedures for workers and visitors</li> <li>KB3. how to summon medical assistance and the emergency services, where necessary</li> <li>KB4. how to use the health, safety and accident reporting procedures and the importance of these</li> </ul>		
	KB5. government agencies in the areas of safety, health and security and their norms and services		
Skills (S)			
A. Core Skills/	Writing Skills		
Generic Skills	You need to know and understand how to:		
	SA1. complete accurate, well written work with attention to detail		
	Reading Skills		
	You need to know and understand how to:		
	SA2. read instructions, guidelines, procedures, rules and service level agreements		
	Oral Communication (Listening and Speaking skills)		
	You need to know and understand how to:		
	SA3. listen effectively and orally communicate information accurately		
B. Professional Skills	Decision Making		
	You need to know and understand how to: SB1. make a decision on a suitable course of action		
	Plan and Organize		
	You need to know and understand how to:		
	SB2. plan and organize your work to meet health, safety and security requirements		
	Customer Centricity		
	You need to know and understand how to:		
	SB3. build and maintain positive and effective relationships with colleagues and		
	customers		
	Problem Solving		
	You need to know and understand how to:		
	SB4. apply problem solving approaches in different situations		
	Analytical Thinking		
	You need to know and understand how to:		
	SB5. analyze data and activities		
	Critical Thinking		
	You need to know and understand how to:		
	SB6. apply balanced judgments to different situations		

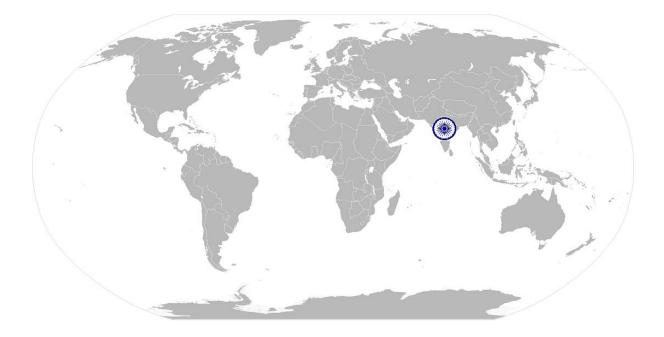






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Transforming the skill landscape

SSC/N9003	Maintain a healthy, safe and secure working environment		
	Attention to Detail		
	You need to know and understand how to:		
	SB7. check your work is complete and free from errors		
	SB8. get your work checked by peers		
	Team Working		
	You need to know and understand how to:		
	SB9. work effectively in a team environment		
C. Technical Skills	You need to know and understand how to:		
	SC1. identify and refer anomalies		
	SC2. help reach agreements with colleagues		
	SC3. keep up to date with changes, procedures and practices in your role		



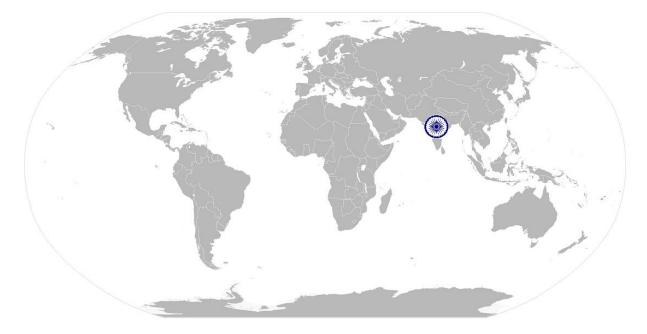






SSC/N9003 NOS Version Control Maintain a healthy, safe and secure working environment

NOS Code	SSC/N9003		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



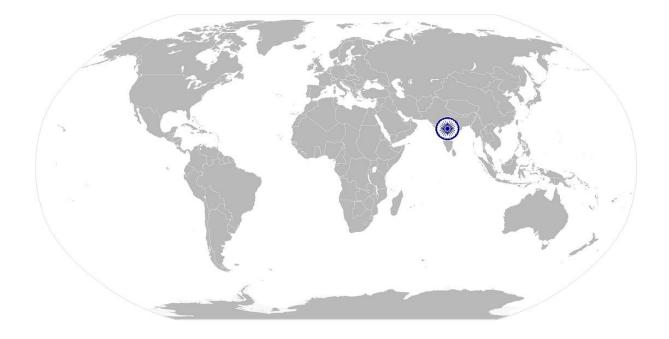






Provide data/information in standard formats

## National Occupational Standard



**Overview** 

This unit is about providing specified data/information related to your work in templates or other standard formats









	SSC/N9004	0004 Provide data/information in standard formats		
/	Unit Code	SSC/N9004		
	Unit Title (Task)	Provide data/information in standard formats		
	Description	This unit is about providing specified data/information related to your work in		
		templates or other standard formats.		
	Scope	This unit/task covers the following:		
		Appropriate people:		
		Iine manager		
		members of your own work group		
		<ul> <li>people in other work groups in your organization</li> </ul>		
		subject matter experts		
		Data/information:		
		guantitative		
		qualitative		
		Sources:		
		within your organization		
		outside your organization		
		Formats:		
		paper-based		
		electronic		
Performance Criteria (PC) w.r.t. the Scope		PC) w.r.t. the Scope		
		To be competent, you must be able to:		
		PC1. establish and agree with appropriate people the data/information you need		
		to provide, the <b>formats</b> in which you need to provide it, and when you need		
		to provide it		
		PC2. obtain the data/information from reliable sources		
		PC3. check that the data/information is accurate, complete and up-to-date		
		PC4. obtain advice or guidance from <b>appropriate people</b> where there are		
		problems with the <b>data/information</b>		
		PC5. carry out rule-based analysis of the <b>data/information</b> , if required		
PC6. insert the <b>data/information</b> into th		PC6. insert the <b>data/information</b> into the agreed <b>formats</b>		
		PC7. check the accuracy of your work, involving colleagues where required		
people		PC8. report any unresolved anomalies in the <b>data/information</b> to <b>appropriate</b>		
		people		
		appropriate people in the required formats on time		
	Knowledge and Unders			
	A. Organizational	You need to know and understand:		
	Context	KA1. your organization's procedures and guidelines for providing data/information		







SSC/N9004	Provide data/information in standard formats		
(Knowledge of the	in standard formats and your role and responsibilities in relation to this		
company/	KA2. the knowledge management culture of your organization		
organization and	KA3. your organization's policies and procedures for recording and sharing		
its processes)	information and the importance of complying with these		
	KA4. the importance of validating data/information before use and how to do this		
	KA5. procedures for updating data in appropriate formats and with proper		
	validation		
	KA6. the purpose of the CRM database		
	KA7. how to use the CRM database to record and extract information		
	KA8. the importance of having your data/information reviewed by others		
	KA9. the scope of any data/information requirements including the level of detail		
	required		
	KA10. the importance of keeping within the scope of work and adhering to		
	timescales		
B. Technical	You need to know and understand:		
Knowledge	KB1. data/information you may need to provide including the sources and how to		
	do this		
	KB2. templates and formats used for data/information including their purpose and		
	how to use these		
	KB3. different techniques used to obtain data/information and how to apply		
	KB4. these		
	KB5. how to carry out rule-based analysis on the data/information		
	KB6. typical anomalies that may occur in data/information		
	KB7. who to go to in the event of inaccurate data/information and how to report		
	this		
Skills (S)			
A. Core Skills/	Writing Skills		
Generic Skills	You need to know and understand how to:		
	SA1. complete accurate, well written work with attention to detail		
	Reading Skills		
	You need to know and understand how to:		
	SA2. read instructions, guidelines, procedures, rules and service level agreements		
	Oral Communication (Listening and Speaking skills)		
	You need to know and understand how to:		
	SA3. listen effectively and orally communicate information accurately		
B. Professional Skills	Decision Making		
	You need to know and understand how to:		
	SB1. follow rule-based decision-making processes		
	SB2. make a decision on a suitable course of action		









SSC/N9004	Provide data/information in standard formats		
	Plan and Organize		
	You need to know and understand how to:		
	SB3. plan and organize your work to achieve targets and deadlines		
	Customer Centricity		
	You need to know and understand how to:		
	SB4. check that your own work meets customer requirements		
	SB5. meet and exceed customer expectations		
	Problem Solving		
	You need to know and understand how to:		
	SB6. apply problem solving approaches in different situations		
	Analytical Thinking		
	You need to know and understand how to:		
	SB7. configure data and disseminate relevant information to others		
	Critical Thinking		
	You need to know and understand how to:		
	SB8. apply balanced judgments to different situations		
	Attention to Detail		
	You need to know and understand how to:		
	SB9. check your work is complete and free from errors		
	SB10. get your work checked by peers		
	Team Working		
	You need to know and understand how to:		
	SB11. work effectively in a team environment		
C. Technical Skills	You need to know and understand how to:		
	SC1. use information technology effectively, to input and/or extract data		
accurately			
	SC2. validate and update data SC3. identify and refer anomalies in data		
	SC4. store and retrieve information		
SC5. share information using standard formats and templates			
	SC6. keep up to date with changes, procedures and practices in your role		



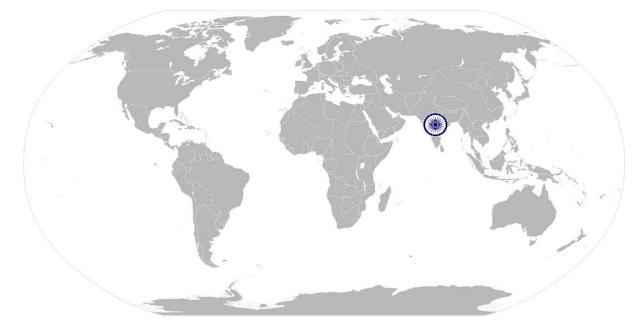




SSC/N9004 NOS Version Control

### Provide data/information in standard formats

NOS Code	SSC/N9004		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019



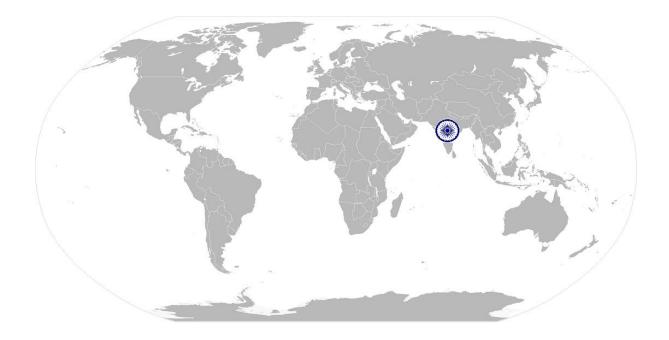






Develop your knowledge, skills and competence

# National Occupational Standard



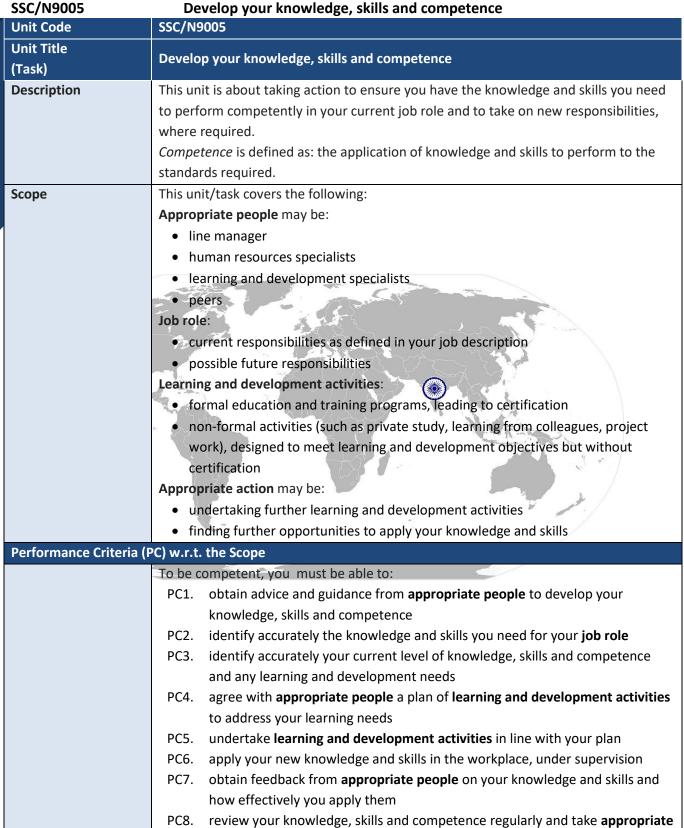
**Overview** 

This unit is about taking action to ensure you have the knowledge and skills you need to perform competently in your current job role and to take on new responsibilities, where required.

















SSC/N9005	Develop your knowledge, skills and competence		
	action		
Knowledge and Unders			
A. Organizational	You need to know and understand:		
Context	KA1. your organization's procedures and guidelines for developing your		
(Knowledge of the	knowledge, skills and competence and your role and responsibilities in		
company/	relation to this		
organization and	KA2. the importance of developing your knowledge, skills and competence to you		
its processes)	and your organization		
	KA3. different methods used by your organization to review skills and knowledge		
	including:		
	<ul> <li>training need analysis</li> </ul>		
	skills need analysis		
	performance appraisals		
	KA4. how to review your knowledge and skills against your job role using different		
	methods and analysis		
	KA5. different types of learning and development activities available for your job		
	role and how to access these		
	KA6. how to produce a plan to address your learning and development needs, who		
	to agree it with and the importance of undertaking the planned activities		
	KA7. different types of support available to help you plan and undertake learning		
	and development activities and how to access these		
	KA8. why it is important to maintain records of your learning and development		
	KA9. methods of obtaining and accepting feedback from appropriate people on		
	your knowledge skills and competence		
	KA10. how to use feedback to develop in your job role		
B. Technical	You need to know and understand:		
Knowledge	KB1. the knowledge and skills required in your job role		
	KB2. your current learning and development needs in relation to your job role		
	KB3. different types of learning styles and methods including those that help you		
	learn best		
	KB4. the importance of taking responsibility for your own learning and		
	development		
	KB5. to the importance of learning and practicing new concepts, theory and how		
	to apply these in the work environment or on samples.		
	KB6. how to explore sample problems and apply solutions		
Skills (S)			
A. Core Skills/	Writing Skills		
Generic Skills	You need to know and understand how to:		
	SA1. communicate with colleagues in writing		



NOS
National Occupational Standards





SSC/N9005	Develop your knowledge, skills and competence		
	Reading Skills		
	You need to know and understand how to:		
	SA2. read instructions, guidelines and procedures		
	Oral Communication (Listening and Speaking skills)		
	You need to know and understand how to:		
	SA3. ask for clarification and advice from line managers		
B. Professional Skills	Decision Making		
	You need to know and understand how to:		
	SB1. make a decision on a suitable course of action		
	Plan and Organize		
	You need to know and understand how to:		
	SB2. plan and organize your work to achieve targets and deadlines		
	Customer Centricity		
	You need to know and understand how to:		
	SB3. check that your own work meets customer requirements		
	Problem Solving		
	You need to know and understand how to:		
	SB4. refer anomalies to the line manager		
	Analytical Thinking		
	You need to know and understand how to:		
	SB5. analyze data and activities		
	Critical Thinking		
	You need to know and understand how to:		
	SB6. apply balanced judgments to different situations		
	Attention to Detail		
	You need to know and understand how to:		
	SB7. check your work is complete and free from errors		
	SB8. get your work checked by peers		
	Team Working		
	You need to know and understand how to:		
	SB9. work effectively in a team environment		
C. Technical Skills	You need to know and understand how to:		
	SC1. use information technology effectively		
	SC2. agree objectives and work requirements		
	SC3. keep up to date with changes, procedures and practices in your role		









SSC/N9005 NOS Version Control Develop your knowledge, skills and competence

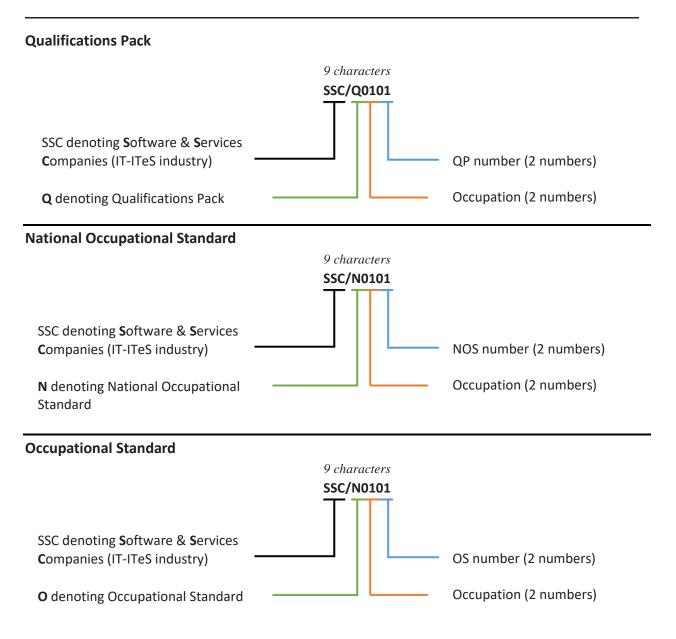
NOS Code	SSC/N9005		
Credits (NSQF)	TBD	Version number	1.0
Industry	IT-ITeS	Drafted on	30/04/2013
Industry Sub-sector	IT Services	Last reviewed on	31/03/2018
		Next review date	31/03/2019







### Nomenclature for QP and NOS Units



It is important to note that an OS unit can be denoted with either an '**O**' or an '**N**'.

- If an OS unit denotes 'O', it is an OS unit that is an international standard. An example of OS unit denoting 'O' is SSC/**O**0101.
- If an OS unit denotes '**N**', it is an OS unit that is a national standard and is applicable only for the Indian IT-ITeS industry. An example of OS unit denoting '**N**' is SSC/N0101





### Nomenclature for QP and NOS Units

### The following acronyms/codes have been used in the nomenclature above:

Sub-Sector	Range of Occupation numbers
IT Service (ITS)	01-20
Business Process Management (BPM)	21-40
Engg. and R&D (ERD)	41-60
Software Products (SPD)	61-80

Sequence	Description	Example
Three letters	Industry name	SSC
	(Software & Service Companies)	
Slash	/	/
Next letter	Whether <b>Q</b> P or <b>N</b> OS	Ν
Next two numbers	Occupation Code	01
Next two numbers	OS number	01





Job Role	Web Developer	
<b>Qualification Pack</b>	SSC/Q0503	
Sector Skill Council	IT-ITeS	

### **Guidelines for Assessment:**

- 1. Criteria for assessment for each Qualification Pack (QP) will be created by the Sector Skill Council (SSC). Each performance criteria (PC) will be assigned Theory and Skill/Practical marks proportional to its importance in NOS.
- 2. The assessment will be conducted online through assessment providers authorised by SSC.
- 3. Format of questions will include a variety of styles suitable to the PC being tested such as multiple choice questions, fill in the blanks, situational judgment test, simulation and programming test.
- 4. To pass a QP, a trainee should pass each individual NOS. Standard passing criteria for each NOS is 70%.
- 5. For latest details on the assessment criteria, please visit <u>www.sscnasscom.com</u>.

				Marks Allocation	
Assessment Outcomes	Assessment Criteria for Outcomes	Total Mark	Out of	Theory	Skills Practical
1. SSC/N0501 (Contribute to the design of software products and	PC1. check your understanding of the Business Requirements Specification (BRS)/User Requirements Specification (URS) with				
applications)	appropriate people	-	10	10	0
	PC2. check your understanding of the Software Requirements Specification (SRS) with appropriate people		10	10	0
	PC3. check your understanding of High Level Design (HLD) with appropriate people		10	10	0
	PC4. design basic programming structures to implement functionality in line with requirements defined in BRS/URS, SRS and HLD	100	30	0	30
	PC5. review your designs with appropriate people		5	5	0
	PC6. analyze inputs from appropriate people to identify, resolve and record design defects and inform future designs		15	5	10
	PC7. document your designs using standard templates and tools		10	0	10
	PC8. comply with your organization's policies, procedures and guidelines when contributing to the design of software products and		10	0	10
	applications	Total	100	40	60







• • • • • • • • •					
2. SSC/N0503 (Develop	PC1. check your understanding of the Business				
media content and	Requirements Specification (BRS), Software				
graphic designs for	Requirements Specification (SRS), High Level				
software products and	Design (HLD) and Low Level Design (LLD) with				
Applications)	appropriate people		10	10	0
	PC2. access reusable components, media and				
	graphical packages and tools from your				
	organization's knowledge base	-	10	0	10
	PC3. convert requirements into media content				
	and graphic designs, leveraging reusable				
	components where available		20	0	20
	PC4. review media content and graphic designs				
	with appropriate people and analyze their				
	feedback	100	10	5	5
	PC5. record any defects and corrective actions				
	taken to inform future work		10	0	10
	PC6. rework media content and graphic designs,				
	incorporating feedback		10	5	5
	PC7. submit media content and graphic designs				
	for approval by appropriate people	_	10	0	10
	PC8. update your organization's knowledge				
	base with your experiences of the media				
	content and graphic designs developed		10	0	10
	PC9. comply with your organization's policies,				
	procedures and guidelines when developing				
	media content and graphic designs for software				
	products and applications		10	0	10
		Total	100	20	80
3.SSC/N9001 (Manage	PC1. establish and agree your work				
your work to meet	requirements with appropriate people				
requirements)			7.5	0	7.5
	PC2. keep your immediate work area clean				
	and tidy		15	7.5	7.5
	PC3. utilize your time effectively		15	7.5	7.5
	PC4. use resources correctly and efficiently	100	15	7.5	
	PC5. treat confidential information correctly				7.5
	,	100	7.5	0	7.5
	PC6. work in line with your organization's		. –		. –
	policies and procedures		15	0	15
	PC7. work within the limits of your job role		7.5	0	7.5
	PC8. obtain guidance from appropriate				
	people, where necessary		7.5	0	7.5
	1				
	PC9. ensure your work meets the agreed				
	PC9. ensure your work meets the agreed requirements		10	0	10
		Total	10 100	0 22.5	10 77.5
4.SSC/N9002 (Work		Total			
4.SSC/N9002 (Work effectively with	requirements	Total 100			





	PC2. work with colleagues to integrate your work effectively with theirs		10	0	10
	PC3. pass on essential information to colleagues				
	in line with organizational requirements	-	10	10	0
	PC4. work in ways that show respect for			_	
	colleagues	-	20	0	20
	PC5. carry out commitments you have made to colleagues		10	0	10
	PC6. let colleagues know in good time if you				
	cannot carry out your commitments, explaining				
	the reasons		10	10	0
	PC7. identify any problems you have working				
	with colleagues and take the initiative to solve				
	these problems		10	0	10
	PC8. follow the organization's policies and				
	procedures for working with colleagues		10	0	10
		Total	100	20	80
5.SSC/N9003 (Maintain a	PC1. comply with your organization's current				
healthy, safe and secure	health, safety and security policies and				
working environment)	procedures	-	20	10	10
	PC2. report any identified breaches in health,				
	safety, and security policies and procedures to				
	the designated person	-	10	0	10
	PC3. identify and correct any hazards that				
	you can deal with safely, competently and		20	10	10
	within the limits of your authority PC4. report any hazards that you are not	-	20	10	10
	competent to deal with to the relevant person	100			
	in line with organizational procedures and warn				
	other people who may be affected		10	0	10
	PC5. follow your organization's emergency	-	10	0	10
	procedures promptly, calmly, and efficiently		20	10	10
	PC6. identify and recommend opportunities				
	for improving health, safety, and security to the				
	designated person		10	0	10
	PC7. complete any health and safety records				
	legibly and accurately		10	0	10
		Total	100	30	70
6.SSC/N9004 (Provide	PC1. establish and agree with appropriate				
data/information in	people the data/information you need to				
standard formats)	provide, the formats in which you need to				
	provide it, and when you need to provide it		15	15	0
	PC2. obtain the data/information from reliable				
	sources	100	15	0	15
	PC3. check that the data/information is				
	accurate, complete and up-to-date		15	5	10
	PC4. obtain advice or guidance from				
	appropriate people where there are problems		-	-	~
	with the data/information		5	5	0





	PC5. carry out rule-based analysis of the		20	0	20
	data/information, if required		20	0	20
	PC6. insert the data/information into the agreed formats		10	0	10
	PC7. check the accuracy of your work, involving		10	0	10
	colleagues where required		10	0	10
	PC8. report any unresolved anomalies in the		10	0	10
	data/information to appropriate people		5	5	0
	PC9. provide complete, accurate and up-to-date			5	0
	data/information to the appropriate people in				
	the required formats on time		5	0	5
		Total	100	30	70
7.SSC/N9005 (Develop	PC1. obtain advice and guidance from				
your knowledge, skills	appropriate people to develop your knowledge,				
and competence)	skills and competence		20	7	13
• •	PC2. identify accurately the knowledge and				
	skills you need for your job role		14	7	7
	PC3. identify accurately your current level of				
	knowledge, skills and competence and any				
	learning and development needs		14	0	14
	PC4. agree with appropriate people a plan of				
	learning and development activities to address				
	your learning needs	100	7	0	7
	PC5. undertake learning and development				
	activities in line with your plan		12	0	12
	PC6. apply your new knowledge and skills in the				
	workplace, under supervision		12	0	12
	PC7. obtain feedback from appropriate people				
	on your knowledge and skills and how		_	-	_
	effectively you apply them	ļ	7	0	7
	PC8. review your knowledge, skills and				
	competence regularly and take appropriate			_	_
	action		14	7	7
		Total	100	21	79