



Skills for Employment Investment Program (SEIP)

COMPETENCY STANDARD FOR SAFETY MANAGEMENT FOR RMG INDUSTRY (RMG SECTOR)

Finance Division, Ministry of Finance
Government of the People's Republic of Bangladesh

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Copyright

The Competency Standard for Safety Management for RMG Industry is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order for individuals who graduated through the established standard via competency-based assessment to be suitably qualified for a relevant job.

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List of Abbreviations

General	
BMET	Bureau of Manpower Employment and Training
B-SEP	Bangladesh Skills for Employment and Productivity
BTEB	Bangladesh Technical Education Board
DTE	Directorate of Technical Education
ILO	International Labor Organization
ISC	Industry Skills Council
NPVC	National Pre-Vocation Certificate
NTVQF	National Technical and Vocational Qualifications Framework
PPP	Public Private Partnership
SCDC	Standards and Curriculum Development Committee
SEIP	Skills for Employment Investment Program
TVET	Technical Vocational Education and Training
UoC	Unit of Competency
Occupation S	Specific
DCP	Dry chemical powder
OHS	Occupational health and safety
PPE	Personal protective equipment
SOP	Standard operating procedure

Introduction

The Skills for Employment Investment Program (SEIP) Project of the Finance Division of the Ministry of Finance has embarked on a project which aims to qualitatively and quantitatively expand the skilling capacity of identified public and private training providers by establishing and operationalising a responsive skill ecosystem and delivery mechanism through a combination of well-defined set of funding triggers and targeted capacity support.

Among the many components of the project, one is to promote a Market Responsive Inclusive Skills Training Delivery programme. Key priority economic growth sectors identified by the government have been targeted by the project to improve current job skills along with up-skilling of the existing workforce to ensure 'required skills to industry standards'. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training programmes. Priority sectors were identified to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

This document is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.

Overview

A **competency standard** is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of national and international subjectmatter experts, SEIP, BTEB, ISC, and industry experts to identify the competencies required of an occupation in a particular sector.

Competency standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. Competency standards acknowledge that people can achieve technical and vocational competency in many ways by emphasising what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guide

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent

Approval Sheet

Identification and validation of units of competency and elements for this occupation were made by experts within this sector. A series of meetings were held to accurately capture industry and employer needs and expectations and develop the competency framework that would help to enhance the employability of the youth trained. This process started on 1 October 2017 and concluded with a validation workshop with working group on 18 November 2017, and was reviewed and revised on 24 October 2018.

Experts Involved

Industry and subject-matter experts who provided their valuable inputs to develop this competency standard [October 2017 – October 2018]:

Name	Organisation	Designation
Ms. Rupali Biswas	BKMEA	Chief Coordinator
Mohammad Manik Mia	BKMEA	Senior Trainer - Fire Safety
Md. Siddiqur Rahman Howlader	Knit Concern Group	Assistant General Manager
Md. Shaheduzzaman	Sustainable Business Solutions Limited	Chief Executive Officer
Engr. Md. Hafizur Rahman	Starlight Sweaters	Fire Safety Engineer
Rashmi Mehra	British Council - SD03	International Consultant and Acting Team Leader
Syed Azharul Haque	British Council - SD03	National Subject Matter Consultant - RMG Sector
Md. Amir Hossain	Dhaka Ahsania Mission	Assistant Consultant - RMG Sector

Development Workshop

Working group formation and competency standard development workshop participants [held on 5 November 2017]:

Name	Organisation	Designation
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Mohammad Manik Mia	BKMEA	Senior Trainer - Fire Safety
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Md. Shaheduzzaman	Sustainable Business Solutions Limited	Chief Executive Officer
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Name	Organisation	Designation
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Syed Azharul Haque	British Council - SD03	National Subject Matter Consultant - RMG Sector
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Validation Workshop

Competency standard validation workshop participants [held on 18 November 2017]:

Name	Organisation	Designation
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Syed Nasir Ershad	SEIP	AEPD (Public-1)
Mr. Md. Ahsan Habib	SEIP	TVET Specialist
Mr. Mohiuzzaman	SEIP	Course Specialist
Dr. Md. Wazed Ali	British Council - SD03	Deputy Team Leader
Syed Azharul Haque	British Council - SD03	National Subject Matter Consultant - RMG Sector
Md. Amir Hossain	Dhaka Ahsania Mission	Assistant Consultant - RMG Sector

The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:

- a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
- the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide

Committee Workshop

The National competency standards for National Skills Certificate in Safety Management for RMG Industry, NTVQF Level [INSERT LEVEL] qualification is a document developed by the Skill for Employment Investment Programme (SEIP), Finance Division, Ministry of Finance. This standard has been developed by an industry expert group under guidance of SEIP. The standard was approved by the SCDC [BTEB to insert date] at NTVQF Cell, BTEB.

Respectable members of the SCDC:

Safety Management for RMG Industry - Level [INSERT LEVEL]		

Course Structure

SL	U	nit Code and Title	Level	Nominal Duration (Hours)
Gener	ric Competencies (4 units o	of competency required)		
1	SEIP-RMG-SMG-01-G	Apply occupational health and safety (OHS) practice in the workplace		8
2	SEIP-RMG-SMG-02-G	Carry out workplace interaction		8
3	SEIP-RMG-SMG-03-G	Operate in a team environment		8
4	SEIP-RMG-SMG-04-G	Apply basic IT skills		16
Sub-T	otal			40
Secto	r-specific Competencies (3	units of competency required)		
1	SEIP-RMG-SMG-01-S	Explore the history of RMG Sector		20
2	SEIP-RMG-SMG-02-S	Carry out measurements and calculations		20
3	SEIP-RMG-SMG-03-S	Read and interpret sketches and drawings		20
Sub-T	otal			60
Occupation-specific Competencies (4 units of competency required)				
1	SEIP-RMG-SMG-01-O	Apply basic knowledge of industrial safety management		140
2	SEIP-RMG-SMG-02-O	Understand fire safety and management systems		30
3	SEIP-RMG-SMG-03-O	Use fire protection tools and equipment		50
4	SEIP-RMG-SMG-04-O	Conduct fire hazard, disaster management and risk assessment		40
Sub-Total			260	
Total Nominal Learning Hours			360	

Units of
Competency

Elements

Generic Specific (Basic) Competencies

Apply occupational health and safety (OHS) practice in the workplace SEIP-RMG-SMG-01-G

Identify OHS policies and procedures	Apply personal health and safety practices	Report hazards and risks
Respond to emergencies		

Carry out workplace interaction SEIP-RMG-SMG-02-G

Interpret workplace communication and etiquette	Read and understand workplace documents	Participate in workplace meetings and discussions
Practice professional ethics at work		

Operate in a team environment SEIP-RMG-SMG-03-G

Identify team goals and work process	Identify own role and responsibilities within team	Communicate and cooperate with team members
Practice problem solving within the team		

Apply basic IT skills SEIP-RMG-SMG-04-G

Identify and use most commonly used IT tools	Understand use of computer	Work with word processing application
Work with spreadsheets	Access email and search the internet	

Sector-specific (Common) Competencies

Explore the history of RMG Sector SEIP-RMG-SMG-01-S	Examine the background of RMG Sector	Identify main industries within RMG sector	Identify prime local and export markets
Carry out calculations and measurements SEIP-RMG-SMG-02-S	Plan and prepare	Obtain measurements	Perform calculations
Read and interpret sketches and drawings SEIP-RMG-SMG-03-S	Interpret information and specifications	Read and interpret sketches and drawings	

Occupation-specific (Core) Competencies

Apply basic knowledge of industrial safety	Define role and responsibilities of safety officer	Identify industrial safety areas	Interpret industrial safety laws and regulations	
management SEIP-RMG-SMG-01-O	Identify major safety issues			
Understand fire safety and management systems SEIP-RMG-SMG-02-O	Analyse fire safety issues	Classify fire extinguishers and methods	Identify fire safety management systems	
Use fire protection tools	Identify tools and equipment	Operate fire protection tools and equipment	Conduct fire drill	
and equipment SEIP-RMG-SMG-03-O	Clean and store tools and equipment			
Conduct fire hazard, disaster management and risk assessment SEIP-RMG-SMG-04-O		Identify disaster management requirements	Perform risk assessment	

Units and Elements Table

Generic – Compulsory (4 units of competency required)

Code	Unit of Competency	Elements of Competency	Duration (hours)			
SEIP-RMG-SMG-01-G	Apply occupational health and safety (OHS) practice in the workplace	 Identify OHS policies and procedures. Apply personal health and safety practices. Report hazards and risks. Respond to emergencies. 	8			
SEIP-RMG-SMG-02-G	Carry out workplace interaction	 Interpret workplace communication and etiquette. Read and understand workplace documents. Participate in workplace meetings and discussions. Practice professional ethics at work. 	8			
SEIP-RMG-SMG-03-G	Operate in a team environment	 Identify team goals and work processes. Identify own role and responsibilities within team. Communicate and co-operate with team members. Practice problem solving within the team. 	8			
SEIP-RMG-SMG-04-G	Apply basic IT skills	 Identify and use most commonly used IT tools. Understand use of computer. Work with word processing application. Work with spreadsheets. Access email and search the internet. 	16			
Total Hours						

Sector-specific – Compulsory (3 units of competency required)

Code	Unit of Competency	Elements of Competency	Duration (hours)
SEIP-RMG-SMG-01-S	Explore the history of RMG Sector	 Examine the background of RMG sector. Identify main departments within RMG sector. List prime local and export markets. 	20
SEIP-RMG-SMG-02-S	Carry out measurements and calculations	 Plan and prepare. Obtain measurements. Perform calculations. 	20
SEIP-RMG-SMG-03-S	Read and interpret sketches and drawings	 Interpret information and specifications. Read and interpret sketches and drawings. 	20
Total Hours	60		

Occupation-specific – Compulsory (4 units of competency required)

Code	Unit of Competency	Elements of Competency	Duration (hours)		
SEIP-RMG-SMG-01-O	Apply basic knowledge of industrial safety management	nowledge of safety officer. 2. Identify industrial safety areas			
SEIP-RMG-SMG-02-O	Understand fire safety and management systems	 Analyse fire safety issues. Classify fire extinguishers and methods. Identify fire safety management systems. 			
SEIP-RMG-SMG-03-O	Use fire protection tools and equipment	 Identify tools and equipment. Operate fire protection tools and equipment. Conduct fire drill. Clean and store tools and equipment. 	50		
SEIP-RMG-SMG-04-O	Conduct fire hazard, disaster management and risk assessment	 Classify fire hazards. Identify disaster management requirements. Perform risk assessment. 	40		
Total Hours			260		

Generic Competencies

Unit Title:	Apply occupational health and safety (OHS) practice in the workplace				
Unit Code:	SEIP-RMG-SMG-01-S				
Nominal Hours:	8 hours				
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to apply occupational health and safety (OHS) practices in the workplace. It specifically includes identifying OHS policies and procedures, applying personal health and safety practices, reporting hazards and risks, and responding to emergencies.				
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)				
Identify OHS policies and procedures	 1.1. OHS policies and safe operating procedures are interpreted 1.2. Safety signs and symbols are identified and followed. 1.3. Response, evacuation procedures and other contingency measures are interpreted correctly. 				
Apply personal health and safety practices	 2.1. OHS policies and procedures are interpreted in the workplace including personal protective equipment (PPE). 2.2. Common health issues are recognised. 2.3. Common safety issues are identified. 				
3. Report hazards and risks	3.1. Hazards and risks are identified.3.2. Hazards and risks assessment and controls are interpreted.				
4. Respond to emergencies	 4.1. Respond to alarms and warning devices. 4.2. Emergency response plans and procedures are responded to. 4.3. First aid procedures during emergency situations are identified. 				

Range of Variables	
Variable	Range (may include but not limited to)
1. OHS policies	1.1. Organisational OHS polices1.2. International OHS requirements1.3. Fire safety rules and regulations
Emergency response plans and procedures	2.1. Firefighting procedures2.2. Earthquake response procedures2.3. Emergency response plans and procedures2.4. Medical and first aid

Range of Variables					
Variable	Range (may include but not limited to)				
3. First aid procedure	3.1. Washing of open wound3.2. Washing chemically infected area3.3. Applying bandage3.4. Taking appropriate medicine				
Personal protective equipment	 4.1. Safety glasses 4.2. Ear plugs 4.3. Gloves 4.4. Apron 4.5. Helmet 4.6. Mask 4.7. Safety shoes 				

Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.						
Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Identified OHS policies and procedures 1.2. Applied personal health and safety practices (including PPE) 1.3. Reported hazards and risks 1.4. Responded to emergencies					
2. Underpinning knowledge	 2.1. Workplace OHS policies and procedures 2.2. Work safety procedures 2.3. Emergency response procedures: 2.3.1. Firefighting 2.3.2. Earthquake response 2.3.3. Accident response 2.4. Types of hazards (biological, chemical and physical) and their effects 2.5. OHS awareness 2.6. Personal protective equipment (PPE) 					
3. Underpinning skills	 3.1. Identifying OHS policies and procedures 3.2. Applying personal health and safety practices 3.3. Reporting hazards and risks 3.4. Responding to emergencies 					

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4. Underpinning attitudes	 4.1. Committed to occupational health and safety practices 4.2. Communicates well with peers, subordinates and seniors in workplace 4.3. Prompt in carrying out activities 4.4. Tidy and punctual 4.5. Sincere and honest concerning duties 4.6. Responsible during emergencies 						
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Personal protective equipment (PPE) 5.3. Firefighting equipment 5.4. Emergency response manual 5.5. First aid kits 5.6. Stationary 5.7. Learning manual						
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio						
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.7.2. Assessment must be done by a suitably qualified/certified						

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

assessor.

Unit Title:	Carry out workplace interaction						
Unit Code:	SEIP-RMG-SMG-02-G						
Nominal Hours:	8 hours						
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to carry out workplace interaction. It specifically includes workplace communication, etiquette, understanding workplace documents, workplace meetings and discussions, and professional ethics at work.						
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)						
Interpret workplace communication and etiquette	Workplace codes of conduct are interpreted as per organisational guidelines.						
enquene	1.2. Appropriate lines of communication are maintained with supervisors and colleagues.						
	1.3. Workplace interactions are conducted in a <u>courteous manner</u> to gather and convey information.						
	1.4. Workplace procedures and matters are comprehended.						
Read and understand workplace documents	 2.1. Workplace documents are interpreted correctly. 2.2. Visual information/symbols/signage are understood correctly and followed. 2.3. Specific and relevant information are accessed from appropriate sources. 2.4. Appropriate medium is used to transfer information and ideas. 						
Participate in workplace meetings and discussions	 3.1. Team meetings are attended on time. 3.2. Meeting procedures and etiquette are followed. 3.3. Active participation is ensured, opinions are expressed and heard. 3.4. Inputs are provided and interpreted in line with the meeting purpose. 						
Practice professional ethics at work	 4.1. Responsibilities as a team member are performed. 4.2. Tasks are performed in accordance with workplace procedures. 4.3. Confidentiality is maintained. 4.4. Inappropriate and conflicting situations are avoided. 						

Range of Variables					
Variable	Range (may include but not limited to)				
1. Courteous manner	1.1. Effective questioning1.2. Active listening1.3. Speaking skills1.4. Writing skill1.5. Email etiquette				
2. Workplace procedures and matters	 2.1. Notes 2.2. Arranging a meeting 2.3. Agenda 2.4. Simple reports such as progress and incident reports 2.5. Job sheets 2.6. Operational manuals 2.7. Brochures and promotional material 2.8. Visual and graphic materials 2.9. Standards 2.10. OHS information 2.11. Signs 				
3. Appropriate sources	3.1. Human Resources (HR) Department3.2. Managers3.3. Supervisors3.4. Management Information System (MIS)				

Evidence Guide The evidence must be authentic, val current version of the Unit of Compe	id, sufficient, reliable, consistent and recent and meet the requirements of the tency.
Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Interpreted workplace communication and etiquette 1.2. Interpreted workplace instructions and symbols 1.3. Performed active participation in workplace meetings
2. Underpinning knowledge	2.1. Workplace communication and etiquette2.2. Workplace documents, signs and symbols2.3. Meeting procedure and etiquette2.4. Professional ethics
3. Underpinning skills	 3.1. Demonstrating workplace communication and etiquette 3.2. Interpreting workplace instructions and symbols 3.3. Demonstrating active participation in workplace meeting 3.4. Applying professional ethics at work

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4. Underpinning attitudes	 4.1. Prompt in carrying out activities 4.2. Tidy and punctual 4.3. Respectful of peers, subordinates and seniors in the workplace 4.4. Concerned about the work environment 4.5. Sincere and honest concerning duties
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Workplace procedures 5.3. Standard operating procedure 5.4. Workplace documents, signs and symbols 5.5. Codes of conduct 5.6. Projector 5.7. Stationary 5.8. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio
7. Context of assessment	 7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency. 7.2. Assessment must be done by a suitably qualified/certified assessor.

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

Unit Title:	Operate in a team environment					
Unit Code:	SEIP-RMG-SMG-03-G					
Nominal Hours:	8 hours					
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to operate in a team environment. It specifically includes identifying team goals and work processes, roles and responsibilities, team communication and problem solving within the team.					
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)					
Identify team goals and work processes	1.1. Roles and objectives of the team are identified and interpreted.1.2. Roles and responsibilities of team members are identified and interpreted.					
Identify own role and responsibilities within team	2.1. Personal role and responsibilities are identified within the team environment.2.2. Reporting relationships are interpreted within team and external to team.					
3. Communicate and co-operate with team members	 3.1. Other teammates' tasks are identified and support provided when requested. 3.2. The team is encouraged through sharing information or expertise, working together to solve problems, and putting team success first. 3.3. Views and opinions of other team members are interpreted and respected. 					
4. Practice problem solving within the team	 4.1. Problems faced at the individual and team level are identified and showed insight into the root-causes of the problems. 4.2. A range of solutions and courses of action are identified together with benefits, costs, and risks associated with each. 4.3. The good ideas of others to help develop solutions are recognised and advice sought from those who have solved similar problems. 4.4. It is looked beyond the obvious and not stopped at the first answers. 					

Range of Variables					
Variable	Range (may include but not limited to)				
Sharing information	1.1. Agenda 1.2. Minutes				
	1.3. progress and incident reports				
	1.4. Operational manuals				
	1.5. Visual and graphic materials				
	1.6. Emails and SMS				
	1.7. Phone directory				
	1.8. Policy, procedure and standards				
	1.9. OHS information				

Evidence Guide The evidence must be authentic, valicurrent version of the Unit of Compet	d, sufficient, reliable, consistent and recent and meet the requirements of the ency.
Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Identified own role and responsibilities within team 1.2. Communicated and co-operated with team members 1.3. Demonstrated problem solving within the team
2. Underpinning knowledge	2.1. Team goals and work processes2.2. Roles and responsibilities2.3. Finding problems and solving them
3. Underpinning skills	3.1. Identifying own role and responsibilities within team3.2. Communicating and co-operating with team members3.3. Demonstrating problem solving within the team
4. Underpinning attitudes	 4.1. Active on teamwork 4.2. Prompt in carrying out activities 4.3. Tidy and punctual 4.4. Respectful of peers, subordinates and seniors in the workplace 4.5. Sincere and honest concerning duties
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Projector 5.3. Stationary 5.4. Learning manual

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6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.
	7.2. Assessment must be done by a suitably qualified/certified assessor.

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

Unit Title:	Apply basic IT skills			
Unit Code:	SEIP-RMG-SMG-04-G			
Nominal Hours:	16 hours			
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to apply basic IT skills in the workplace. It specifically includes identifying IT tools, using computer, word processing and spreadsheet applications, email and searching on internet.			
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)			
Identify and use most commonly used IT tools	1.1. History of information technology (IT) is identified and summarised.1.2. Commonly used <u>IT tools</u> are identified and described.			
2. Understand use of computer	 2.1. Basic parts of a computer are identified. 2.2. Turning on and off technique of a computer is performed. 2.3. Working environment, functions and features of operating system is interpreted. 2.4. Simple trouble-shooting techniques are applied. 			
3. Work with word processing application	 3.1. Word processing application appropriate to perform activity is operated. 3.2. Basic typing technique to document is applied. 3.3. Word processing techniques to document are employed. 3.4. Personal CV writing using suitable word processing techniques is practiced. 3.5. Saving and retrieving technique of a document is used. 			
4. Work with spreadsheets	 4.1. Spreadsheet working environment, functions and features are identified and interpreted. 4.2. Data entry on spreadsheet appropriate to perform activity is performed. 4.3. <u>Data manipulation techniques</u> to spreadsheet document are applied. 4.4. Spreadsheet document is created and saved. 			
5. Access email and search the internet	 5.1. Use of email account in online environment is explained. 5.2. Writing and sending of workplace emails is completed. 5.3. Different <u>browsers</u> to work online are identified and selected. 5.4. Browse different web portals and apply proper search techniques. 			

Range of Variables					
Variable	Range (may include but not limited to)				
1. IT tools	1.1. Cell phone1.2. Tablets1.3. Computers, laptops, notebooks1.4. Internet1.5. Software				
	1.6. Satellite				
2. Data manipulation techniques	 2.1. Sum 2.2. Average 2.3. Count 2.4. Max 2.5. Min 2.6. If 2.7. Sort 2.8. Fill 2.9. Header 2.10. Footer 2.11. Print 				
3. Browsers	 3.1. Internet Explorer 3.2. Firefox 3.3. Google Chrome 3.4. Opera 3.5. Safari 3.6. Omni Web 3.7. Microsoft Edge 				

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Identified commonly used IT tools	
	1.2. Performed simple trouble-shooting with computer	
	1.3. Performed typing on word processing software, saved and retrieved documents	
	1.4. Performed data entry with spread sheet	
	1.5. Used email account for different online purposes	

Evidence Guide The evidence must be authentic, value current version of the Unit of Compe	lid, sufficient, reliable, consistent and recent and meet the requirements of the tency.
2. Underpinning knowledge	2.1. IT and IT tools2.2. Computer trouble-shooting2.3. Techniques to access internet
3. Underpinning skills	 3.1. Demonstrating simple trouble-shooting with computer 3.2. Demonstrating typing on word processing software 3.3. Demonstrating data entry with spread sheet 3.4. Opening email account and using it for different purposes
4. Underpinning attitudes	 4.1. Active on teamwork 4.2. Prompt in carrying out activities 4.3. Tidy and punctual 4.4. Respectful of peers, subordinates and seniors in the workplace 4.5. Sincere and honest concerning duties
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. IT tools 5.3. Computer/laptop/notebook 5.4. Software 5.5. Internet 5.6. Projector 5.7. Stationary 5.8. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

assessor.

7.2. Assessment must be done by a suitably qualified/certified

Sector-specific Competencies

Unit Title:	Explore the history of RMG Sector		
Unit Code:	SEIP-RMG-SMG-01-S		
Nominal Hours:	20 hours		
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to explore the history of RMG Sector in Bangladesh. It specifically includes examining the background of RMG sector, identifying the main departments within the RMG sector, and identifying prime local and export markets.		
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)		
Examine the background of RMG sector	1.1. Historical background of RMG sector is examined and described.1.2. Backward and forward linkages are identified.		
Identify main departments within RMG sector	 2.1. Main departments of the RMG sector are identified. 2.2. Importance of RMG sector and main departments is explored and analysed. 2.3. Common types of machine used in RMG sector are identified. 		
Identify prime local and export markets	3.1. Prime local markets and <u>export markets</u> are identified.3.2. Local and export markets are listed.		

Range of Variables		
Variable	Range (may include but not limited to)	
1. Main departments	1.1. PDS	
	1.2. Store	
	1.3. Cutting	
	1.4. Embellishment	
	1.5. Sewing	
	1.6. Washing	
	1.7. Finishing	
	1.8. Quality	
	1.9. Industrial engineering	
	1.10. Production planning	
	1.11. Production control	
	1.12. Maintenance	
	1.13. Merchandising	

Range of Variables			
Variable	Range (may include but not limited to)		
2. Types of machine	2.1. Single needle		
	2.2. Double needle		
	2.3. Overlock		
	2.4. Flatlock		
	2.5. Feed of the arm		
	2.6. Kansai multi needle		
	2.7. Bartuck		
	2.8. Button needle		
	2.9. Button stitch		
	2.10. Snap attach		
3. Export markets	3.1. United States		
	3.2. European		
	3.3. Asian		

Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.		
Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Illustrated history of RMG sector 1.2. Identified prime local and export markets	
2. Underpinning knowledge	2.1. History of RMG sector2.2. Main departments2.3. Common types of machinery2.4. Prime local and export markets	
3. Underpinning skills	3.1. Describing the history of RMG sector3.2. Identifying prime local and export markets	
4. Underpinning attitudes	 4.1. Eager to learn 4.2. Considerate of personal grooming 4.3. Patient and attentive 4.4. Active on team work 4.5. Tidy and punctual 4.6. Sincere and honest concerning duties 	

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5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Map/globe 5.3. Projector 5.4. Stationary 5.5. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.7.2. Assessment must be done by a suitably qualified/certified assessor.

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

Unit Title:	Carry out measurements and calculations		
Unit Code:	SEIP-RMG-SMG-02-S		
Nominal Hours:	20 hours		
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required for carry out measurements and calculations in the workplace. It specifically includes planning and preparing to take measurements, obtaining measurements, and performing calculations.		
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)		
1. Plan and prepare	 1.1. Work instructions are confirmed and applied to the job in hand. 1.2. Materials to be measured are identified as per job specification. 1.3. Appropriate measuring device is identified and selected based on materials to be measured. 1.4. Specifications are obtained and verified from relevant documents. 		
2. Obtain measurements	 2.1. Method of obtaining measurement is selected and applied. 2.2. Measurements are obtained using appropriate device in accordance with job requirement. 2.3. Measurements, including area, volume, tolerance and clearance limits, are confirmed and applied. 		
3. Perform calculations	 3.1. <u>Calculations</u>, using basic operations, for determining material requirement are taken. 3.2. Appropriate <u>formulas</u> for calculating quantities are selected. 3.3. Quantities are estimated from the calculation taken. 3.4. Material quantities are calculated, confirmed and recorded within tolerances. 		

Range of Variables		
Variable	Range (may include but not limited to)	
1. Measuring device	1.1. Measuring tape1.2. Steel rule1.3. Calculator1.4. Sets square	
2. Documents	2.1. Technical manuals2.2. Specifications2.3. Sketches2.4. Drawings2.5. Charts2.6. Photographs	

Range of Variables		
Variable	Range (may include but not limited to)	
3. Measurements	3.1. Length3.2. Width3.3. Weight3.4. Tolerance	
4. Calculations	 4.1. Addition 4.2. Subtraction 4.3. Multiplication 4.4. Division 4.5. Area 4.6. Volume 4.7. Circumference 4.8. CBM 4.9. Volumetric weight 	
5. Formulas	5.1. Fractions5.2. Percentages5.3. Mixed numbers5.4. Conversions5.5. Scales	

Evidence Guide The evidence must be authentic, val current version of the Unit of Compe	id, sufficient, reliable, consistent and recent and meet the requirements of the tency.
Critical aspects of competency	Assessment required evidence that the candidate: 1.1. Identified and selected appropriate measuring devices 1.2. Carried out measurements for apparel 1.3. Identified and selected correct mathematical formula 1.4. Performed calculations as per job requirement
2. Underpinning knowledge	 2.1. Measuring devices 2.2. Basic mathematical formulas 2.3. Simple calculation techniques 2.4. Garment allowances and tolerances 2.5. Recording data procedures
3. Underpinning skills	3.1. Identifying appropriate measuring devices3.2. Carrying out measurements for apparel3.3. Performing calculations as per job requirement

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4. Underpinning attitudes	 4.1. Committed to occupational health and safety practices 4.2. Communicates well with peers, subordinates and seniors in workplace 4.3. Prompt in carrying out activities 4.4. Tidy and punctual 4.5. Sincere and honest concerning duties
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Computer/laptop/notebook 5.3. Calculator 5.4. Measuring tape 5.5. Projector 5.6. Stationary 5.7. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.7.2. Assessment must be done by a suitably qualified/certified assessor.

Accreditation Requirements

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Unit Title:	Read and interpret sketches and drawings			
Unit Code:	SEIP-RMG-SMG-03-S			
Nominal Hours:	20 hours			
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to read and interpret sketches and drawings. It specifically includes interpreting information and specifications, and reading and interpreting sketches and drawings.			
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)			
Interpret information and specifications	 1.1. Appropriate manuals for work activity are identified and collected. 1.2. Information and specifications in the manuals is interpreted and applied. 			
Read and interpret sketches and drawings	 2.1. Relevant <u>sketches and drawings</u> are identified for job requirement. 2.2. Key <u>terms and abbreviations</u> are identified and interpreted. 2.3. <u>Signs and symbols</u> are identified and interpreted. 2.4. Schedules, dimensions, sketches, drawings and specifications are correctly read and interpreted. 			

Range of Variables				
Variable	Range (may include but not limited to)			
1. Manuals	 1.1. Buyers specification 1.2. Compliance 1.3. Maintenance procedure 1.4. Periodic maintenance 1.5. Quality assurance 1.6. Standard operating procedure (SOP) 			
2. Sketches and drawings	2.1. Technical2.2. Measurement2.3. Design			
3. Specifications	3.1. Product3.2. Performance3.3. Method			
4. Terms and abbreviations	4.1. Refers to all terms and abbreviations associated with the RMG Sector			
5. Signs and symbols	5.1. Includes all signs and symbols associated with the RMG Sector			

Evidence Guide The evidence must be authentic, volument version of the Unit of Comparison of Compa	ralid, sufficient, reliable, consistent and recent and meet the requirements of the betency.
Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Identified information and specifications 1.2. Read and interpreted sketches and drawings
2. Underpinning knowledge	2.1. Manuals2.2. Units of measurement2.3. Units of conversion2.4. Sketch, drawings and specifications
3. Underpinning skills	3.1. Read and identifying information and specifications (from manual) 3.2. Reading and interpreting sketches and drawings
4. Underpinning attitudes	 4.1. Eager to learn 4.2. Tidy and punctual 4.3. Concerned about proper use of computer and peripherals 4.4. Concerns for other's rights 4.5. Sincere and honest concerning duties
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Computer/laptop/notebook 5.3. Software 5.4. Stationary 5.5. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test

7. Context of assessment

7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.

7.2. Assessment must be done by a suitably qualified/certified assessor.

Accreditation Requirements

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6.2. Oral test6.3. Observation6.4. Demonstration

6.5. Portfolio

Occupation-specific Competencies

Unit Title:	Apply basic knowledge of industrial safety management				
Unit Code:	SEIP-RMG-SMG-01-O				
Nominal Hours:	140 hours				
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to apply basic knowledge of industrial safety management. It specifically includes defining the role and responsibilities of a safety officer, identifying industrial safety areas, interpreting industrial safety laws and regulations, and identifying major safety issues.				
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)				
Define role and responsibilities of safety officer	 1.1. Role and responsibilities of safety officer are identified and described. 1.2. Organisational policies, processes, procedures, guidelines and codes of conduct are identified. 				
Identify industrial safety areas	 2.1. <u>Industrial safety areas</u> are identified and defined. 2.2. <u>Types of measures</u> to be implemented for industrial safety are identified. 				
Interpret industrial safety laws and regulations	 3.1. <u>National laws and regulations</u> are identified and interpreted. 3.2. International rules, regulations and conventions are identified and briefly described. 				
4. Identify major safety issues	 4.1. <u>Major safety issues</u> are identified and described. 4.2. Methods to eliminate, reduce or control major safety issues are identified. 				

Range of Variables				
Variable	Range (may include but not limited to)			
1. Roles and Responsibilities	Importance of building code relating to fire and other common workplace hazards			
	1.2. Compliance with electrical safety codes and management issues			
	1.3. Fire risk assessments when building, equipment or process is built or modified			
	1.4. Proper storage and maintenance of hazardous (solid and liquid) materials			
	1.5. Installation of fire detection and automatic/semi-automatic fire alarm systems			
	1.6. Arrangement of correct fire extinguishers and hydrants			
	1.7. Training workers on fire extinguisher use			
	1.8. Training workers on fire alarm, emergency evacuation and assembly procedures			
	1.9. Management of chemicals (transportation, storage, use and disposal)			
	1.10. Management of environmental compliance issues (audit, conducting training, reporting, documentation)			
	1.11. Conducting fire drills regularly according to local laws			
	1.12. Conducting internal safety audit			
	1.13. Safety reporting and recording			
2. Industrial safety areas	2.1. Fire			
	2.2. Building			
	2.3. Electrical			
	2.4. Chemical			
	2.5. Environmental			
3. Types of measures	3.1. Policy			
	3.2. Committee			
	3.3. Monitoring and auditing			
	3.4. Training			
	3.5. Reporting			
	3.6. Regulatory bodies			
4. National laws and	4.1. BNBC 2006, BLA 2006, BLR 2015, ECA 1995, ECR 1997			
regulations	4.2. Fire Act and Rules 1965			
	4.3. Boiler Act 1923 and Boiler Rules 1961			
	4.4. Electricity Rules 1937			
	4.5. Accord and Alliance Standards			
	4.6. NFPA Standard			
	4.7. Buyers' Code of Conduct			

Range of Variables				
Variable	Range (may include but not limited to)			
5. Major safety issues	 5.1 Exposure to cotton dust 5.2 Exposure to hazardous chemicals 5.3 Exposure to electricity 5.4 Carelessness 5.5 Smoking 			

Evidence Guide The evidence must be outbestic welld sufficient reliable consistent and recent and most

current version of the Unit of Compet	tency.
Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Defined role and responsibilities of safety officer 1.2. Identified industrial safety areas 1.3. Identified measures to implement for industrial safety 1.4. Interpreted national laws, rules and regulations 1.5. Identified major safety issues
2. Underpinning knowledge	 2.1. Safety officer role and responsibilities 2.2. Organisational policies, processes, procedures, guidelines and codes of conduct 2.3. Industrial safety management systems 2.4. National laws, rules and regulations 2.5. Hazard control measures 2.6. Standard operating procedure
3. Underpinning skills	 3.1. Defining role and responsibilities of safety officer 3.2. Identifying industrial safety areas 3.3. Interpreting national laws, rules and regulations 3.4. Identify major safety issues and control measurers
4. Underpinning attitudes	 4.1. Tidy and punctual 4.2. Prompt in carrying out activities 4.3. Sincere and honest concerning duties 4.4. Active on teamwork 4.5. Eager to learn 4.6. Respectful of peers, subordinates and seniors in the workplace 4.7. Communicate with peers and seniors in the workplace 4.8. Concerned for proper use of tools 4.9. Committed to occupational health and safety practices 4.10. Responsible during emergencies

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

5. Resource implications	The following resources must be provided:
	5.1. Workplace (simulated or actual)
	5.2. Computer/laptop/notebook
	5.3. National laws, rules and regulations
	5.4. Policies and guidelines
	5.5. Code of conduct
	5.6. Standard operating procedure
	5.7. Projector
	5.8. Stationary
	5.9. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to:
	6.1. Written test
	6.2. Oral test
	6.3. Observation
	6.4. Demonstration
	6.5. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.
	7.2. Assessment must be done by a suitably qualified/certified

Accreditation Requirements

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assessor.

Unit Title:	Understand fire safety and management systems				
Unit Code:	SEIP-RMG-SMG-02-O				
Nominal Hours:	30 hours				
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to apply understand fire safety and management systems. It specifically includes analysing fire safety issues, classify fire extinguishers and methods, and identifying fire safety management systems.				
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)				
1. Analyse fire safety issues	 Classification of fire is identified and interpreted. Main causes of fire are identified and described. Process of heat dissemination is explained. Active fire protection strategies are identified and described. Passive fire protection strategies are identified and described. Material used for fire-rated floor, wall and door design are identified. 				
Classify fire extinguishers and methods	 2.1. Types of fire extinguisher are identified and differentiated. 2.2. Appropriate firefighting personal protective equipment (PPE) is identified. 2.3. Methods of fire extinguishing are identified and explained. 				
Identify fire safety management systems	3.1. Types of fire safety management systems are identified.3.2. Fire safety management systems are described and compared.				

Range of Variables		
Range (may include but not limited to)		
 1.1. Type A: Solid 1.2. Type B: Liquid 1.3. Type C: Gas 1.4. Type D: Metal 1.5. Type E: Electrical 1.6. Type K/F: Cooking 		

Range of Variables					
Variable	Range (may include but not limited to)				
2. Main causes of fire	 2.1. Electrical faults 2.2. Gas leakage 2.3. Arson 2.4. Wrong/poor chemical management 2.5. Flammable substance 2.6. Unauthorised smoking 				
3. Process of heat dissemination	3.1. Conduction3.2. Convection3.3. Radiation				
Active fire protection strategies	 4.1. Awareness 4.2. Use of portable fire extinguisher 4.3. Apply firefighting tools 4.4. Implement hydrant and standpipe system 4.5. Use of sprinkler system 4.6. Fire alarm and detection 				
5. Passive fire protection strategies	 5.1. Fire-rated floor 5.2. Fire-rated door 5.3. Fire-rated wall 5.4. Fire/smoke dampers 5.5. Photo luminescent 5.6. Egress path marker 5.7. Occupancy separation 				
6. Types of fire extinguisher	 6.1. Dry chemical powder (DCP) 6.2. CO₂ 6.3. Foam 6.4. Water 6.5. Wet chemical 				
7. Methods of fire extinguishing	7.1. Starvation method7.2. Smothering method7.3. Cooling method7.4. Poisoning the flame method (stop chain reaction)				

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Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Classified types of fire 1.2. Identified main causes of fires 1.3. Identified active and passive fire protection strategies 1.4. Identify types of fire extinguisher 1.5. Identified fire safety management systems
2. Underpinning knowledge	 2.1. Fire classification 2.2. Heat dissemination 2.3. Fire protection strategies 2.4. Fire extinguishing methods 2.5. Fire safety management systems 2.6. Personal protective equipment (PPE) 2.7. Standard operating procedures
3. Underpinning skills	 3.1. Classifying types of fire 3.2. Identifying main causes of fires 3.3. Explaining active and passive fire protection strategies 3.4. Describing fire safety management systems
4. Underpinning attitudes	 4.1. Tidy and punctual 4.2. Prompt in carrying out activities 4.3. Sincere and honest concerning duties 4.4. Active on teamwork 4.5. Eager to learn 4.6. Respectful of peers, subordinates and seniors in the workplace 4.7. Communicate with peers and seniors in the workplace 4.8. Concerned for proper use of tools 4.9. Committed to occupational health and safety practices 4.10. Responsible during emergencies
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Computer/laptop/notebook 5.3. Personal protective equipment (PPE) 5.4. Fire extinguishers 5.5. Projector 5.6. Stationary 5.7. Learning manual

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The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.7.2. Assessment must be done by a suitably qualified/certified assessor.

Accreditation Requirements

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Unit Title:	Use fire protection tools and equipment
Unit Code:	SEIP-RMG-SMG-03-O
Nominal Hours:	50 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to use fire protection tools and equipment. It specifically includes identifying tools and equipment, operating fire protection tools and equipment, conducting fire drill, and cleaning and storing tools and equipment.
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)
Identify tools and equipment	1.1. <u>Firefighting tools and equipment</u> are identified.1.2. Firefighting tools and equipment are described and classified.
Operate fire protection tools and equipment	2.1. Firefighting protection tools and equipment are collected and checked for usability. 2.2. Appropriate parameters are set to a surject of CDEC in identified.
	2.2. Appropriate personal protective equipment (PPE) is identified and collected.
	2.3. Firefighting protection tools and equipment are operated properly and safely.
3. Conduct fire drill	3.1. Fire drills are classified and described.
	3.2. Fire drill teams are formed.
	3.3. Role and responsibilities of individual teams are identified.
	3.4. Fire drill is conducted.
Clean and store tools and equipment	4.1. Firefighting tools and equipment are cleaned and stored after use.
	4.2. Waste materials are disposed of as per standard operating procedure.

Range of Variables	
Variable	Range (may include but not limited to)
Firefighting tools and equipment	 1.1 Emergency light 1.2 Hose reel 1.3 Raising 1.4 Breathing apparatus 1.5 Fire shovel 1.6 Ball type fire extinguisher 1.7 Fire hook 1.8 Lock cutter 1.9 Fire blanket 1.10 Fire extinguisher 1.11 Personal protective equipment (PPE)

Range of Variables	
Variable	Range (may include but not limited to)
2. Fire drills	2.1. Announced 2.2. Unannounced
3. Fire drill teams	3.1. Firefighting3.2. Rescue3.3. First aid
Role and responsibilities of individual teams	 4.1. Firefighting team: 4.1.1. Use fire alarm to evacuate 4.1.2. Switch off main circuit breaker 4.1.3. Remove flammable materials to isolate fire source 4.1.4. Use firefighting equipment 4.2. Rescue team: 4.2.1. Evacuate staff and workers
	 4.2.2. Clear obstacles from exit points 4.2.3. Rescue injured people 4.3. First aid team: 4.3.1. Apply first aid to injured people 4.3.2. Call police, ambulance and/or fire department

current version of the Unit of Competency.	
Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Identified firefighting tools and equipment 1.2. Checked firefighting tools and equipment for usability 1.3. Operated firefighting tools and equipment 1.4. Conduct fire drill 1.5. Cleaned and store tools and equipment
2. Underpinning knowledge	 2.1. Firefighting tools and equipment 2.2. Personal protective equipment (PPE) 2.3. First aid 2.4. Fire drills 2.5. Roles and responsibilities 2.6. Standard operating procedure

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
3. Underpinning skills	 3.1. Identifying firefighting tools and equipment 3.2. Checking usability of firefighting tools and equipment 3.3. Operating firefighting tools and equipment 3.4. Conducting fire drill 3.5. Cleaning and maintaining firefighting tools and equipment 3.6. Disposing of waste materials properly
4. Underpinning attitudes	 4.1. Tidy and punctual 4.2. Prompt in carrying out activities 4.3. Sincere and honest concerning duties 4.4. Active on teamwork 4.5. Eager to learn 4.6. Respectful of peers, subordinates and seniors in the workplace 4.7. Communicate with peers and seniors in the workplace 4.8. Concerned for proper use of tools 4.9. Committed to occupational health and safety practices 4.10. Responsible during emergencies
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Computer/laptop/notebook 5.3. Personal protective equipment (PPE) 5.4. Firefighting tools and equipment 5.5. Fire extinguishers 5.6. First aid kit 5.7. Standard operating procedure 5.8. Projector 5.9. Stationary 5.10. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.7.2. Assessment must be done by a suitably qualified/certified assessor.

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

Accreditation Requirements

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Unit Title:	Conduct fire hazard, disaster management and risk assessment
Unit Code:	SEIP-RMG-SMG-04-O
Nominal Hours:	40 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to conduct fire hazard, disaster management and risk assessment. It specifically includes classifying hazards, identifying disaster management requirements, and performing risk assessment.
Elements of Competency	Performance Criteria (bold and underlined terms are elaborated in the Range of Variables)
Classify fire hazards	 1.1. Types of fire hazard are identified and described. 1.2. Methods to eliminate, reduce or control the hazard are identified.
Identify disaster management requirements	 2.1. Types of industrial disaster are identified and described. 2.2. Tools and methods of disaster management are identified and explained. 2.3. Disaster management technology is identified and defined.
3. Perform risk assessment	 3.1. Elements of risk are identified and interpreted. 3.2. Six-step method of risk assessment is explained. 3.3. Fire safety checklist is prepared, and safety check carried out. 3.4. Fire safety assessment report is prepared and analysed.

Range of Variables	
Variable	Range (may include but not limited to)
1. Types of fire hazard	1.1. Physical1.2. Chemical1.3. Biological1.4. Ergonomic
2. Types of disaster	2.1. Earthquake2.2. Flooding2.3. Building collapse2.4. Fire2.5. Chemical spill

Range of Variables	
Variable	Range (may include but not limited to)
3. Tools and methods of disaster management	3.1. Prevention3.2. Mitigation3.3. Preparedness3.4. Response3.5. Recovery3.6. Evaluation3.7. Development
Disaster management technology	 4.1. Mapping 4.2. Aerial photography 4.3. Remote sensing 4.4. Communications 4.5. Information management 4.6. Logistics
5. Elements of risk	5.1. People5.2. Property5.3. Environment5.4. Tools, equipment and machinery
Six-step methods of risk assessment	 6.1. Identify hazard 6.2. Identify people at risk 6.3. Remove/reduce hazard 6.4. Assign the risk category 6.5. Decide if existing fire safety arrangements are suitable 6.6. Record findings

current version of the Unit of Competency.	
1. Critical aspects of	Assessment must evidence that the candidate:
competency	1.1. Classified types of fire hazard
	1.2. Identified types of industrial disaster
	1.3. Identified tools and methods of disaster management
	1.4. Explained six-step method of risk assessment
	1.5. Conducted fire safety assessment
	1.6. Prepared fire safety assessment report

Evidence Guide		
The evidence must be au		

2. Underpinning knowledge	 2.1. Fire hazards 2.2. Methods of hazard control 2.3. Industrial disasters 2.4. Disaster management tools and methods 2.5. Disaster management technology 2.6. Risk assessment 2.7. Fire safety
3. Underpinning skills	 3.1. Classifying types of fire hazard 3.2. Explaining six-step method of risk assessment 3.3. Preparing fire safety checklist 3.4. Conducting fire safety assessment 3.5. Completing fire safety assessment report
4. Underpinning attitudes	 4.1. Tidy and punctual 4.2. Prompt in carrying out activities 4.3. Sincere and honest concerning duties 4.4. Active on teamwork 4.5. Eager to learn 4.6. Respectful of peers, subordinates and seniors in the workplace 4.7. Communicate with peers and seniors in the workplace 4.8. Concerned for proper use of tools 4.9. Committed to occupational health and safety practices 4.10. Responsible during emergencies
5. Resource implications	The following resources must be provided: 5.1. Workplace (simulated or actual) 5.2. Computer/laptop/notebook 5.3. 5.4. Projector 5.5. Stationary 5.6. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: 6.1. Written test 6.2. Oral test 6.3. Observation 6.4. Demonstration 6.5. Portfolio

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

- 7. Context of assessment
- **7.1.** Competency assessment must be done in a training institute or an actual or simulated workplace after completion of this unit of competency.
- **7.2.** Assessment must be done by a suitably qualified/certified assessor.

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.