



Skills for Employment Investment Program (SEIP)

COMPETENCY STANDARD FOR MOBILE PHONE SERVICING (IT SECTOR)

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

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Copyright

The Competency Standard for Mobile Phone Servicing 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 Specific	
BGA	Ball Grid Array
DC	Direct current
EMI	Electro-magnetic interference
ESD	Electro-static discharge
IC	Integrated circuit
IT	Information technology
KPI	Key performance indicator
LCD	Liquid Crystal Display
OHS	Occupational health and safety
PPE	Personal protective equipment
RAM	Random Access Memory
RF	Radio frequency
SMD	Surface mounted device
USB	Universal serial bus

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 subject-matter 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 14 May 2018 and concluded with a validation workshop with working group on 18 September 2018.

Experts Involved

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

Name	Organisation	Designation
Jitendra Kumar Roy	PKSF	Assistant Coordinator
Md. Abdur Rahman Bablu	Rural Reconstruction Foundation	Chief Instructor
Selimul Haque	Rural Reconstruction Foundation	Instructor
Md. Akmal Hossain	AMTI	Proprietor and Trainer
MS Anjuman Ara Begum	PKSF	Program Officer
David King	British Council - SD03	Team Leader
Mahbub Ul Huda	British Council - SD03	National Subject Matter Consultant - IT Sector

Development Workshop

Working group formation and competency standard development workshop participants [held on 17 July 2018]:

Name	Organisation	Designation
Shafquat Haider	ISC-IT	Chairman
Golam Gilane	PKSF-SEIP	Assistant Manager (Operations) and Program Officer
Md. Abdur Rahman Bablu	RRF (Jessore)	Chief Instructor
Md. Akmal Hossain	AMTI	Proprietor and Trainer
M. Rabiul Islam	DAM-VTC	Instructor - Mobile Phone
MS Anjuman Ara Begum	PKSF	Program Officer
Dr. Md. Shah Alam Mojumder	BTEB	Specialist (Course Accreditation)
Syed Nasir Ershad	SEIP	AEPD (Public 1)
Mr. Md. Ahsan Habib	SEIP	TVET Specialist

Name	Organisation	Designation
David King	British Council - SD03	Team Leader
Mahbub Ul Huda	British Council - SD03	National Subject Matter Consultant - IT Sector

Validation Workshop

Competency standard validation workshop participants [held on 18 September 2018]:

Name	Organisation	Designation
Md. Abdur Rahman Bablu	RRF (Jessore)	Chief Instructor
Md. Akmal Hossain	AMTI	Proprietor and Trainer
M. Rabiul Islam	DAM-VTC	Instructor - Mobile Phone
Syed Nasir Ershad	SEIP	AEPD (Public 1)
Mr. Md. Ahsan Habib	SEIP	TVET Specialist
Mr. Mohiuzzaman	SEIP	Course Specialist
Md. Abdur Razzaque	SEIP	Specialist-1 (Competency Standards)
David King	British Council - SD03	Team Leader
Mahbub Ul Huda	British Council - SD03	National Subject Matter Consultant - IT 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 Mobile Phone Servicing, **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:

Mobile Phone Servicing - Level [INSERT LEVEL]		

Course Structure

SL	Unit Code and Title		Level	Nominal Duration (Hours)
Generic Competencies (3 units of competency required)				
1	SEIP-IT-MPS-01-G	Carry out workplace interaction in English		20
2	SEIP-IT-MPS-02-G	Operate in a team environment		16
4	SEIP-IT-MPS-03-G	Apply basic IT skills		16
Sub-Total				52
Sector-specific Competencies (3 units of competency required)				
1	SEIP-IT-MPS-01-S	Apply occupational health and safety (OHS) practice in the workplace		16
3	SEIP-IT-MPS-02-S	Use internet and social network		16
4	SEIP-IT-MPS-03-S	Comply with ethical standards in IT workplace		16
Sub-Total				48
Occupation-specific Competencies (5 units of competency required)				
1	SEIP-IT-MPS-01-O	Apply basic knowledge of mobile phone servicing		48
2	SEIP-IT-MPS-02-O	Read and interpret schematic diagrams		28
3	SEIP-IT-MPS-03-O	Use tools and equipment for servicing		76
4	SEIP-IT-MPS-04-O	Perform troubleshooting		72
5	SEIP-IT-MPS-05-O	Implement business practices		36
Sub-Total				260
Total Nominal Learning Hours				360

Competency Chart

Units of Competency	Elements		
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Generic Specific (Basic) Competencies

Carry out workplace interaction in English SEIP-IT-MPS-01-G	Interpret workplace communication and etiquette	Read and understand workplace documents	Participate in workplace meetings and discussions
	Apply professional ethics at work		
Operate in a team environment SEIP-IT-MPS-02-G	Identify team goals and work processes	Identify own role and responsibilities within team	Communicate and co-operate with team members
	Perform problem solving within the team		
Apply basic IT skills SEIP-IT-MPS-03-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

Apply occupational health and safety (OHS) practice in the workplace SEIP-IT-MPS-01-S	Identify OHS policies and procedures	Apply personal health and safety practices	Report hazards and risks
	Respond to emergencies		
Use internet and social network SEIP-IT-MPS-02-S	Interpret internet and social network	Use audio and video messaging applications	Use social network
Comply with ethical standards in IT workplace SEIP-IT-MPS-03-S	Interpret the interests of clients	Deliver quality products and services	Apply professionalism at work
	Comply with workplace code of conduct		

Occupation-specific (Core) Competencies

Apply basic knowledge of mobile phone servicing (MPS) SEIP-IT-MPS-01-O	Explain mobile phone servicing	Use electronics parts and components	
Read and interpret schematic diagrams SEIP-IT-MPS-02-O	Interpret schematic diagrams	Use schematic diagrams	
Use tools and equipment for servicing SEIP-IT-MPS-03-O	Use tools and equipment	Carry out soldering	Work with major components
Perform troubleshooting SEIP-IT-MPS-04-O	Repair liquid damage	Resolve hardware issues	Resolve software issues
Implement business practices SEIP-IT-MPS-05-O	Apply business practices	Understand customer service	Perform required gesture and posture during customer service

Units and Elements Table

Generic – Compulsory (3 units of competency required)

Code	Unit of Competency	Elements of Competency	Duration (hours)
SEIP-IT-MPS-01-G	Carry out workplace interaction in English	<ol style="list-style-type: none"> 1. Interpret workplace communication and etiquette. 2. Read and understand workplace documents. 3. Participate in workplace meetings and discussions. 4. Apply professional ethics at work. 	20
SEIP-IT-MPS-02-G	Operate in a team environment	<ol style="list-style-type: none"> 1. Identify team goals and work processes. 2. Identify own role and responsibilities within team. 3. Communicate and co-operate with team members. 4. Perform problem solving within the team. 	16
SEIP-IT-MPS-03-G	Apply basic IT skills	<ol style="list-style-type: none"> 1. Identify and use most commonly used IT tools. 2. Understand use of computer. 3. Work with word processing application. 4. Work with spreadsheets. 5. Access email and search the internet. 	16
Total Hours			56

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

Code	Unit of Competency	Elements of Competency	Duration (hours)
SEIP-IT-MPS-01-S	Apply occupational health and safety (OHS) practice in the workplace	<ol style="list-style-type: none"> 1. Identify OHS policies and procedures. 2. Apply personal health and safety Practices. 3. Report hazards and risks. 4. Respond to emergencies. 	16
SEIP-IT-MPS-02-S	Use internet and social network	<ol style="list-style-type: none"> 1. Interpret internet and social network. 2. Use audio and video messaging applications. 3. Use social network. 	16
SEIP-IT-MPS-03-S	Comply with ethical standards in IT workplace	<ol style="list-style-type: none"> 1. Interpret the interests of clients. 2. Deliver quality products and services. 3. Apply professionalism at work. 4. Comply with workplace code of conduct. 	16
Total Hours			48

Occupation-specific – Compulsory (5 units of competency required)

Code	Unit of Competency	Elements of Competency	Duration (hours)
SEIP-IT-MPS-01-O	Apply basic knowledge of mobile phone servicing (MPS)	<ol style="list-style-type: none"> 1. Explain mobile phone servicing. 2. Use electronics parts and components. 3. Apply life skills in mobile phone servicing. 	48
SEIP-IT-MPS-02-O	Read and interpret schematic diagrams	<ol style="list-style-type: none"> 1. Explain schematic diagrams. 2. Use of schematic diagrams. 	28
SEIP-IT-MPS-03-O	Use tools and equipment for servicing	<ol style="list-style-type: none"> 1. Use tools and equipment. 2. Carry out soldering. 3. Work with major components. 	76
SEIP-IT-MPS-04-O	Perform troubleshooting	<ol style="list-style-type: none"> 1. Repair liquid damage. 2. Resolve hardware issues. 3. Resolve software issues. 	72
SEIP-IT-MPS-05-O	Implement business practices	<ol style="list-style-type: none"> 1. Apply business practices. 2. Understand customer service. 3. Perform required gesture and posture during customer service. 	36
Total Hours			260

Generic Competencies

Unit Title:	Carry out workplace interaction in English
Unit Code:	SEIP-IT-MPS-01-G
Nominal Hours:	20 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 (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Interpret workplace communication and etiquette	<p>1.1. Workplace codes of conduct are interpreted as per organisational guidelines.</p> <p>1.2. Appropriate lines of communication are maintained with supervisors and colleagues.</p> <p>1.3. Workplace interactions are conducted in a <u>courteous manner</u> to gather and convey information.</p> <p>1.4. <u>Workplace procedures and matters</u> are comprehended.</p>
2. Read and understand workplace documents	<p>2.1. Workplace documents are interpreted correctly.</p> <p>2.2. Visual information/symbols/signage are understood correctly and followed.</p> <p>2.3. Specific and relevant information are accessed from <u>appropriate sources</u>.</p> <p>2.4. Appropriate medium is used to transfer information and ideas.</p>
3. Participate in workplace meetings and discussions	<p>3.1. Team meetings are attended on time.</p> <p>3.2. Meeting procedures and etiquette are followed.</p> <p>3.3. Active participation is ensured, opinions are expressed and heard.</p> <p>3.4. Inputs are provided and interpreted in line with the meeting purpose.</p>
4. Practice professional ethics at work	<p>4.1. Responsibilities as a team member are performed.</p> <p>4.2. Tasks are performed in accordance with workplace procedures.</p> <p>4.3. Confidentiality is maintained.</p> <p>4.4. Inappropriate and conflicting situations are avoided.</p>

Range of Variables	
Variable	Range (may include but not limited to)
1. Courteous manner	1.1. Effective questioning 1.2. Active listening 1.3. Speaking skills 1.4. Writing skill 1.5. 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) Department 3.2. Managers 3.3. Supervisors 3.4. Management Information System (MIS)

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.	
1. Critical aspects of competency	Assessment must evidence that the candidate: <ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 2.1. Workplace communication and etiquette 2.2. Workplace documents, signs and symbols 2.3. Meeting procedure and etiquette 2.4. Professional ethics
3. Underpinning skills	<ol style="list-style-type: none"> 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

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.

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. Demonstration 6.3. Oral test 6.4. Observation 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-IT-MPS-02-G
Nominal Hours:	16 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to operate in a team environment. It specifically includes team goals and work processes, roles and responsibilities, team communication and problem solving within the team.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Identify team goals and work processes	<p>1.1. Roles and objectives of the team are identified and interpreted.</p> <p>1.2. Roles and responsibilities of team members are identified and interpreted.</p>
2. Identify own role and responsibilities within team	<p>2.1. Personal role and responsibilities are identified within the team environment.</p> <p>2.2. Reporting relationships are interpreted within team and external to team.</p>
3. Communicate and co-operate with team members	<p>3.1. Other teammates' tasks are identified and support provided when requested.</p> <p>3.2. The team is encouraged through <u>sharing information</u> or expertise, working together to solve problems, and putting team success first.</p> <p>3.3. Views and opinions of other team members are interpreted and respected.</p>
4. Practice problem solving within the team	<p>4.1. Problems faced at the individual and team level are identified and showed insight into the root-causes of the problems.</p> <p>4.2. A range of solutions and courses of action are identified together with benefits, costs, and risks associated with each.</p> <p>4.3. The good ideas of others to help develop solutions are recognised and advice sought from those who have solved similar problems.</p> <p>4.4. It is looked beyond the obvious and not stopped at the first answers.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. 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, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Underpinning knowledge	1.1. Team goals and work processes 1.2. Roles and responsibilities 1.3. Finding problems and solving them
2. Underpinning skills	2.1. Identifying own role and responsibilities within team 2.2. Communicating and co-operating with team members 2.3. Demonstrating problem solving within the team
3. Underpinning attitudes	3.1. Active on teamwork 3.2. Prompt in carrying out activities 3.3. Tidy and punctual 3.4. Respectful of peers, subordinates and seniors in the workplace 3.5. Sincere and honest concerning duties
4. Underpinning knowledge	4.1. Team goals and work processes 4.2. Roles and responsibilities 4.3. Finding problems and solving them
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

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.

6. Methods of assessment

Methods of assessment may include but is not limited to:

- 6.1.** Written test
- 6.2.** Demonstration
- 6.3.** Oral test
- 6.4.** Observation
- 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-IT-MPS-03-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 common IT tools, using computer, word processing and spreadsheet applications, email and searching on internet.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Identify and use most commonly used IT tools	<p>1.1. History of information technology (IT) is identified and summarised.</p> <p>1.2. Commonly used <u>IT tools</u> are identified and described.</p>
2. Understand use of computer	<p>2.1. Basic parts of a computer are identified.</p> <p>2.2. Turning on and off technique of a computer is performed.</p> <p>2.3. Working environment, functions and features of operating system is interpreted.</p> <p>2.4. Simple trouble-shooting techniques are applied.</p>
3. Work with word processing application	<p>3.1. Word processing application appropriate to perform activity is operated.</p> <p>3.2. Basic typing technique to document is applied.</p> <p>3.3. Word processing techniques to document are employed.</p> <p>3.4. Personal CV writing using suitable word processing techniques is practiced.</p> <p>3.5. Saving and retrieving technique of a document is used.</p>
4. Work with spreadsheets	<p>4.1. Spreadsheet working environment, functions and features are identified and interpreted.</p> <p>4.2. Data entry on spreadsheet appropriate to perform activity is performed.</p> <p>4.3. <u>Data manipulation techniques</u> to spreadsheet document are applied.</p> <p>4.4. Spreadsheet document is created and saved.</p>
5. Access email and search the internet	<p>5.1. Use of email account in online environment is explained.</p> <p>5.2. Writing and sending of workplace emails is completed.</p> <p>5.3. Different <u>browsers</u> to work online are identified and selected.</p> <p>5.4. Browse different web portals and apply proper search techniques.</p>

Range of Variables	
Variable	Range (may include but not limited to)
1. IT tools	1.1. Cell phone 1.2. Tablets 1.3. Computers, laptops, notebooks 1.4. Internet 1.5. 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 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.	
1. Critical aspects of competency	Assessment must evidence that the candidate: <ol style="list-style-type: none"> 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 spreadsheet 1.5. Used email account for different online purposes
2. Underpinning knowledge	<ol style="list-style-type: none"> 2.1. IT and IT tools 2.2. Computer trouble-shooting 2.3. Techniques to access internet

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.

<p>3. Underpinning skills</p>	<p>3.1. Demonstrating simple trouble-shooting with computer 3.2. Demonstrating typing on word processing software 3.3. Demonstrating data entry with spreadsheet 3.4. Opening email account and using it for different purposes</p>
<p>4. Underpinning attitudes</p>	<p>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</p>
<p>5. Resource implications</p>	<p>The following resources must be provided:</p> <p>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</p>
<p>6. Methods of assessment</p>	<p>Methods of assessment may include but is not limited to:</p> <p>6.1. Written test 6.2. Demonstration 6.3. Oral test 6.4. Observation 6.5. Portfolio</p>
<p>7. Context of assessment</p>	<p>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.</p>

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.

Sector-specific Competencies

Unit Title:	Apply occupational health and safety (OHS) practice in the workplace
Unit Code:	SEIP-IT-MPS-01-S
Nominal Hours:	16 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 (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Identify OHS policies and procedures	<p>1.1. <u>OHS policies</u> and safe operating procedures are interpreted.</p> <p>1.2. Safety signs and symbols are identified and followed.</p> <p>1.3. Response, evacuation procedures and other contingency measures are interpreted correctly.</p>
2. Apply personal health and safety practices	<p>2.1. OHS policies and procedures are applied in the workplace including <u>personal protective equipment (PPE)</u>.</p> <p>2.2. Common health issues are recognised.</p> <p>2.3. Common safety issues are identified.</p>
3. Report hazards and risks	<p>3.1. Hazards and risks are identified.</p> <p>3.2. Hazards and risks assessment and controls are interpreted.</p>
4. Respond to emergencies	<p>4.1. Respond to alarms and warning devices.</p> <p>4.2. <u>Emergency response plans and procedures</u> are responded to.</p> <p>4.3. <u>First aid procedures</u> during emergency situations are identified.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. OHS policies	<p>1.1. Organisational OHS policies</p> <p>1.2. International OHS requirements</p> <p>1.3. Fire safety rules and regulations</p>
2. Emergency response plans and procedures	<p>2.1. Firefighting procedures</p> <p>2.2. Earthquake response procedures</p> <p>2.3. Emergency response plans and procedures</p> <p>2.4. Medical and first aid</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
3. First aid procedure	3.1. Washing of open wound 3.2. Washing chemically infected area 3.3. Applying bandage 3.4. Taking appropriate medicine
4. 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.	
1. Critical aspects of competency	Assessment must evidence that the candidate: <ul style="list-style-type: none"> 1.1. Identified OHS policies and procedures 1.2. Applied personal health and safety practices (including PPE) 1.3. Reported hazards and risks 1.1. Responded to emergencies
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1. Workplace OHS policies and procedures 2.2. Work safety procedures 2.3. Emergency response procedures: <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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

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.

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. Demonstration 6.3. Oral test 6.4. Observation 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:	Use internet and social network
Unit Code:	SEIP-IT-MPS-02-S
Nominal Hours:	16 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to practice the use of internet and social network. It specifically includes explaining the internet and social networks, using audio and video messaging applications and using social network.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Interpret internet and social network	1.1. The internet and how it is used is explained. 1.2. Appropriate social networks are identified.
2. Use audio and video messaging applications	2.1. Audio and video equipment appropriate to work activity is identified. 2.2. Audio and video applications appropriate to work activity are identified. 2.3. <u>Video</u> conferencing with appropriate <u>application</u> is carried out. 2.4. <u>Audio</u> conferencing with appropriate <u>application</u> is carried out.
3. Use social network	3.1. Account on <u>social network</u> is created. 3.2. Social network is used effectively.

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. Video application	1.1. Skype 1.2. WhatsApp 1.3. Duo 1.4. Viber 1.5. Messenger
2. Audio application	2.1. Uber conference 2.2. Wiggio
3. Social network	3.1. Facebook 3.2. Workplace 3.3. Twitter 3.4. LinkedIn 3.5. YouTube 3.6. Google Plus 3.7. Flickr

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
4. Keyboard layout	4.1. Avro Easy 4.2. Avro Phonetic 4.3. Bijoy 4.4. Bijoy Unicode 4.5. Bornona 4.6. Munir_Optima_uni 4.7. National (Jatio) 4.8. Probhat (semi phonetic)
5. Style and formats	5.1. File names 5.2. Hyperlinks 5.3. Page layout 5.4. Word styles – ValleyView templates 5.5. Borders, lines and outlines 5.6. Graphics and tables 5.7. Fonts style, size and formats

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.	
1. Critical aspects of competency	Assessment must evidence that the candidate: <ol style="list-style-type: none"> 1.1. Explained internet and social network 1.2. Used audio and video messaging applications correctly 1.3. Performed use of social network appropriately
2. Underpinning knowledge	<ol style="list-style-type: none"> 2.1. Online audio messaging 2.2. Video messaging 2.3. Social media
3. Underpinning skills	<ol style="list-style-type: none"> 3.1. Interpreting internet and social network 3.2. Using audio and video messaging applications correctly 3.3. Demonstrating appropriate use of social network
4. Underpinning attitudes	<ol style="list-style-type: none"> 4.1. Eager to learn 4.2. Tidy and punctual 4.3. Concerned about proper use of computer and peripherals 4.4. Concerned for other's rights 4.5. Observes netiquette 4.6. Sincere and honest concerning duties

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.

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. Internet
- 5.5. Popular browsers
- 5.6. Audio-video chatting applications
- 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. Demonstration
- 6.3. Oral test
- 6.4. Observation
- 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:	Comply with ethical standards in IT workplace
Unit Code:	SEIP-IT-MPS-03-S
Nominal Hours:	16 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to comply with ethical standards within the IT workplace. It specifically includes identifying points of client satisfaction, quality product and service delivery, professionalism and complying with workplace code of conduct.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Interpret the interests of clients	<p>1.1. Client's view and interests are interpreted and respected.</p> <p>1.2. Confidentiality of information is maintained in accordance with organisational policies, <u>national legislation</u> and workplace policies.</p> <p>1.3. Potential conflicts of interest are identified and informed to the proper authority.</p>
2. Deliver quality products and services	<p>2.1. Benchmark of product and service quality is identified.</p> <p>2.2. Necessity of quality product and service delivery is identified and followed.</p> <p>2.3. Quality process for products and services is implemented.</p>
3. Apply professionalism at work	<p>3.1. Agreed standards to deliver product or services and commitment to delivery deadlines is maintained.</p> <p>3.2. Professional image in the workplace is maintained.</p> <p>3.3. Negotiate effectively with clients.</p>
4. Comply with workplace code of conduct	<p>4.1. IT security requirements are complied with.</p> <p>4.2. Workplace code of conduct is identified and interpreted.</p> <p>4.3. Workplace code of conduct is followed as stated in company guidelines.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. National legislation	<p>1.1. Industry/sector code of ethics</p> <p>1.2. International and national guidelines for consumer protection</p> <p>1.3. International and national copyright laws</p> <p>1.4. Occupational health and safety requirements</p> <p>1.5. Intellectual property rights law</p> <p>1.6. Legal and regulatory policies in the information technology sector</p> <p>1.7. Fire safety rules and regulations</p>

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.

1. Critical aspects of competency	Assessment must evidence that the candidate: 1.1. Interpreted quality products and services 1.2. Applied professionalism in the workplace 1.3. Complied with workplace code of conduct
2. Underpinning knowledge	2.1. Code of conduct in the workplace 2.2. Industry and international standards 2.3. Client satisfaction
3. Underpinning skills	3.1. Interpreting quality product and services 3.2. Demonstrating professionalism in the workplace 3.3. Complying with workplace code of conduct
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. Concerned 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. Internet 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. Demonstration 6.3. Oral test 6.4. Observation 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.

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.

Accreditation Requirements

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Occupation-specific Competencies

Unit Title:	Apply basic knowledge of mobile phone servicing
Unit Code:	SEIP-IT-MPS-01-O
Nominal Hours:	48 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to apply basic knowledge of mobile phone servicing (MPS). It specifically includes describing mobile phone servicing process, and using electronics parts and components.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Describe mobile phone servicing	<p>1.1. <u>Evolution</u> of mobile phone is described.</p> <p>1.2. <u>Brands of mobile phone</u> are identified and described.</p> <p>1.3. <u>Basic functions</u> of a mobile phone are identified and explained.</p> <p>1.4. Required <u>tools, equipment, and materials</u> for phone servicing are identified.</p> <p>1.5. Mobile phone servicing process is explained.</p>
2. Use electronics parts and components	<p>2.1. Ohm's law is explained.</p> <p>2.2. Series and parallel circuits are described.</p> <p>2.3. <u>Electronic components</u> and circuit symbols are identified and function explained.</p> <p>2.4. Measuring instruments are used for testing parts, components and <u>electrical quantities</u>.</p> <p>2.5. Electronic components are applied to mobile phone circuits.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. Evolution	<p>1.1. Hardware</p> <p>1.2. Software</p> <p>1.3. Operating system</p>
2. Brands of mobile phone	<p>2.1. Nokia</p> <p>2.2. Symphony</p> <p>2.3. Samsung</p> <p>2.4. iPhone</p> <p>2.5. Mi</p> <p>2.6. Oppo</p> <p>2.7. Asus</p> <p>2.8. One plus</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
3. Basic functions	<ul style="list-style-type: none"> 3.1. SIM function 3.2. Message 3.3. Call log 3.4. Contacts 3.5. Organiser 3.6. Games 3.7. Gallery/storage 3.8. Multimedia 3.9. Settings 3.10. Apps
4. Tools, equipment and materials	<ul style="list-style-type: none"> 4.1. Tools: <ul style="list-style-type: none"> 4.1.1. Opening tools and tweezers 4.1.2. Soldering and de-soldering tools 4.1.3. Multi tester 4.1.4. SMD workstation 4.1.5. DC power supply 4.2. Equipment: <ul style="list-style-type: none"> 4.2.1. PCB (Printed Circuit Board) holder or PCB stand 4.2.2. Blade cutter 4.2.3. Point cutter 4.2.4. Nose cutter 4.2.5. Precision screwdriver 4.2.6. Battery booster 4.2.7. Cleaning kits 4.2.8. BGA kits 4.2.9. Magnifying lamp 4.2.10. Hit lamp 4.2.11. Multi plug 4.2.12. Computer/laptop/notebook 4.3. Materials: <ul style="list-style-type: none"> 4.3.1. Thinner 4.3.2. Solder wire 4.3.3. Jumper wire 4.3.4. Liquid flux 4.3.5. Paste flux 4.3.6. Solder paste

Range of Variables	
Variable	Range (may include but not limited to)
5. Electronics components	5.1. Resistors 5.2. Capacitors 5.3. Transistors 5.4. Diodes 5.5. Fuse 5.6. Coils and inductors 5.7. RF & IF amplifiers and filters 5.8. EMI and ESD filters 5.9. Integrated circuits (IC)
6. Electrical quantities	6.1. Voltage 6.2. Resistance 6.3. Current

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.	
1. Critical aspects of competency	Assessment must evidence that the candidate: <ol style="list-style-type: none"> 1.1. Explained mobile phone servicing process 1.2. Described basic functions of mobile phone 1.3. Identified tools, equipment and materials 1.4. Applied electronic parts and components 1.5. Used measuring instruments for testing
2. Underpinning knowledge	<ol style="list-style-type: none"> 2.1. Functions of mobile phone 2.2. Mobile phone brands 2.3. Tools, equipment and materials 2.4. Electronic parts and components 2.5. Ohm's law 2.6. Series and parallel circuits
3. Underpinning skills	<ol style="list-style-type: none"> 3.1. Explaining mobile phone servicing 3.2. Identifying tools, equipment and materials 3.3. Identifying electronic parts and components 3.4. Using measuring instruments to test parts, components and electrical quantities 3.5. Carried out mobile phone servicing

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.

4. Underpinning attitudes	<ul style="list-style-type: none">4.1. Prompting to carrying out activities4.2. Tidy and punctual4.3. Sincere and honest concerning tasks4.4. Concerned for client's rights4.5. Accepts job is competitive in nature4.6. Eager to learn4.7. Observes netiquette4.8. Concern about proper use of computer and peripherals
5. Resource implications	The following resources must be provided: <ul style="list-style-type: none">5.1. Workplace (simulated or actual)5.2. Computer/laptop/notebook5.3. Software5.4. Internet5.5. Tools, equipment and materials5.6. Mobile phones5.7. Projector5.8. Stationary5.9. Learning manual
6. Methods of assessment	Methods of assessment may include but is not limited to: <ul style="list-style-type: none">6.1. Written test6.2. Demonstration6.3. Oral test6.4. Observation6.5. Portfolio
7. Context of assessment	<ul style="list-style-type: none">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 schematic diagrams
Unit Code:	SEIP-IT-MPS-02-O
Nominal Hours:	28 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to read and interpret schematic diagrams. It specifically includes interpreting schematic diagrams and using schematic diagrams in mobile phone servicing.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Interpret schematic diagrams	<p>1.1. Schematic diagram of mobile phone is identified and explained.</p> <p>1.2. Components of power section, control section and network section are identified.</p> <p>1.3. <u>Symbols and layout</u> of all sections are identified and described.</p>
2. Use schematic diagrams	<p>2.1. Hazard due to failure of component is identified.</p> <p>2.2. Fault is identified on schematic diagram.</p> <p>2.3. Solution is marked on schematic diagram.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. Symbols and layout	<p>1.1. Resistors</p> <p>1.2. Capacitor</p> <p>1.3. Transistors</p> <p>1.4. Diodes</p> <p>1.5. Coils</p> <p>1.6. Integrated circuits</p> <p>1.7. Regulators and converters</p> <p>1.8. RF filter</p> <p>1.9. Battery (lithium ion, lithium polymer)</p> <p>1.10. Power switch, microphone, speaker, and ringer</p> <p>1.11. Clock crystal oscillator</p> <p>1.12. 13/26 MHz crystal</p> <p>1.13. Fuse</p>

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.

1. Critical aspect of competency	Assessment required evidence that the candidate: 1.1. Identified and interpreted schematic diagram 1.2. Used schematic diagram in carrying out servicing
2. Underpinning knowledge	2.1. Schematic diagrams 2.2. Component layout
3. Underpinning skills	3.1. Identifying schematic diagrams 3.2. Interpreting schematic diagrams 3.3. Using schematic diagram in performing servicing
4. Underpinning attitudes	4.1. Prompting to carrying out activities 4.2. Tidy and punctual 4.3. Sincere and honest concerning tasks 4.4. Concerned for client's rights 4.5. Accepts job is competitive in nature 4.6. Eager to learn 4.7. Observes netiquette 4.8. Concern about proper use of computer and peripherals
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. Internet 5.5. Schematic diagrams 5.6. Mobile phones 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. Demonstration 6.3. Oral test 6.4. Observation 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.

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.

Accreditation Requirements

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Unit Title:	Use tools and equipment for servicing
Unit Code:	SEIP-IT-MPS-03-O
Nominal Hours:	76 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to use tools and equipment for servicing. It specifically includes using tools and equipment required for mobile phone servicing, carrying out soldering and working with major components of mobile phones.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Use tools and equipment	<p>1.1. Mobile phone disassembling and assembling steps are identified and explained.</p> <p>1.2. Tools and equipment are correctly identified as per job requirements and used to dismantle <u>mobile phone</u>.</p> <p>1.3. <u>Testing procedures</u> are implemented and performed on mobile phone components.</p> <p>1.4. <u>Mobile phone components</u> are cleaned using cleaning tools.</p> <p>1.5. Mobile phone is properly reassembled.</p>
2. Carry out soldering	<p>2.1. <u>Soldering process</u> is identified and explained.</p> <p>2.2. Hand soldering process is carried out as per job requirements.</p> <p>2.3. Mobile phone components are de-soldered and soldered as per job requirements.</p>
3. Work with major components	<p>3.1. <u>Major integrated circuits</u> of mobile phones are identified.</p> <p>3.2. Integrated circuit operation in the circuitry is explained.</p> <p>3.3. Integrated circuits are disassembled, inspected and reassembled.</p> <p>3.4. BGA chips in mobile phones are re-balled manually.</p> <p>3.5. LCD and touch screen panels are disassembled, inspected, cleaned and reassembled.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. Mobile phone	<p>1.1. Bar</p> <p>1.2. Smart</p>
2. Testing procedures	<p>2.1. Test speaker, buzzer or ringer</p> <p>2.2. Test microphone or mouthpiece</p> <p>2.3. Test charger voltage</p> <p>2.4. Test vibra motor</p> <p>2.5. Test battery voltage</p> <p>2.6. Test power ON OFF switch</p>

Range of Variables	
Variable	Range (may include but not limited to)
3. Soldering process	3.1. Hand 3.2. Machine
4. Mobile phone components	4.1. Charging ports 4.2. Power buttons 4.3. Flex cables 4.4. SIM card tray 4.5. Memory modules 4.6. Camera modules 4.7. Battery sockets 4.8. LCD connector modules 4.9. Microphone 4.10. Micro speakers 4.11. Switches 4.12. Charging pins 4.13. Antenna battery 4.14. USB connectors
5. Major integrated circuits	5.1. Power management 5.2. Application processor 5.3. Flash 5.4. RAM

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.	
1. Critical aspects of competency	Assessment must evidence that the candidate: <ol style="list-style-type: none"> 1.1. Used appropriate tools and equipment 1.2. Applied correct soldering process 1.3. Worked with major components
2. Underpinning knowledge	<ol style="list-style-type: none"> 2.1. Different mobile phone brands 2.2. Soldering 2.3. BGA 2.4. LCD/touch screen panel 2.5. Integrated circuitry 2.6. Major components
3. Underpinning skills	<ol style="list-style-type: none"> 3.1. Identifying and using tools and equipment 3.2. Performing soldering process (hand and machine) 3.3. Disassembling and assembling major components

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.

4. Underpinning attitudes

- 4.1. Prompting to carrying out activities
- 4.2. Tidy and punctual
- 4.3. Sincere and honest concerning tasks
- 4.4. Concerned for client's rights
- 4.5. Accepts job is competitive in nature
- 4.6. Eager to learn
- 4.7. Observes netiquette
- 4.8. Concern about proper use of computer and peripherals

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. Internet
- 5.5. Tools and equipment
- 5.6. Mobile phones
- 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. Demonstration
- 6.3. Oral test
- 6.4. Observation
- 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:	Perform troubleshooting
Unit Code:	SEIP-IT-MPS-04-O
Nominal Hours:	72 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to perform troubleshooting. It specifically includes repairing liquid damage, and resolving hardware and software issues.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Repair liquid damage	<p>1.1. <u>Types of liquid damage</u> are identified and described.</p> <p>1.2. <u>Process of repairing liquid damage</u> is explained.</p> <p>1.3. <u>Tools and equipment</u> to repair damage are identified and selected.</p> <p>1.4. <u>Cleaning methods</u> used in liquid damage repair are identified.</p> <p>1.5. Repair and cleaning process is carried using appropriate tools and equipment as per job requirements.</p> <p>1.6. Work area is cleaned and waste materials are disposed of properly.</p>
2. Resolve hardware issues	<p>2.1. <u>Hardware issues</u> are identified and explained.</p> <p>2.2. Hardware issues are resolved as per standard operating procedure.</p>
3. Resolve software issues	<p>3.1. Mobile phone <u>setting issues</u> are identified and explained.</p> <p>3.2. Setting issues are resolved as per standard operating procedure.</p> <p>3.3. <u>Software issues</u> are identified and explained.</p> <p>3.4. Software issues are resolved as per standard operating procedure.</p> <p>3.5. Data is transferred to and/or from mobile phone.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. Types of liquid damage	<p>1.1. Toilet</p> <p>1.2. Fresh</p> <p>1.3. Drink</p> <p>1.4. Salt</p> <p>1.5. Food</p>

Range of Variables	
Variable	Range <i>(may include but not limited to)</i>
2. Process of repairing liquid damage	2.1. Turn off phone 2.2. Visual inspection 2.3. Prepare for chemical clean 2.4. Remove screws 2.5. Remove screen 2.6. Remove internal connectors 2.7. Remove battery and charging port connectors 2.8. Remove motherboard 2.9. Chemically clean with ultrasonic cleaner 2.10. Final manual clean 2.11. Dry device components 2.12. Reassemble device 2.13. Test device
3. Tools and equipment	3.1. Opening tools 3.2. Cleaning tools 3.3. Drying tool (SMD)
4. Cleaning methods	4.1. Ultrasonic 4.2. Hand cleaning
5. Hardware issues	5.1. Charging 5.2. SIM card 5.3. Keypad 5.4. LED light 5.5. Audio 5.6. Mouthpiece 5.7. Earpiece 5.8. Buzzer 5.9. Ringer 5.10. Headset 5.11. Vibra motor 5.12. LCD display 5.13. Touch problem 5.14. Battery 5.15. Camera 5.16. RF circuit

Range of Variables	
Variable	Range (may include but not limited to)
6. Setting issues	<ul style="list-style-type: none"> 6.1. Dead phone 6.2. Network connectivity 6.3. Phone locked 6.4. Country access 6.5. FRP lock
7. Software issues	<ul style="list-style-type: none"> 7.1. Operating system (Symbian, windows, android, iOS) 7.2. Battery drain 7.3. Frozen or slow user interface 7.4. Connectivity 7.5. Google Now problems 7.6. Stalled text messages 7.7. Overheating 7.8. Syncing error 7.9. App crashes 7.10. Unresponsive screen 7.11. Google Play Store keeps crashing 7.12. Apps will not download 7.13. Bad autocorrect suggestions 7.14. Your kids make purchases 7.15. Home screen clutter 7.16. Too many contacts

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.	
1. Critical aspects of competency	Assessment required evidence that the candidate: <ul style="list-style-type: none"> 1.1. Identified and repaired liquid damage 1.2. Identified and resolved hardware issues 1.3. Identified and resolved software issues
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1. Repair tools, equipment and materials 2.2. Schematic diagrams 2.3. Liquid damage 2.4. Common hardware issues 2.5. Common software issues
3. Underpinning skills	<ul style="list-style-type: none"> 3.1. Identifying, explaining and repairing liquid damage 3.2. Identifying and resolving hardware issues 3.3. Identifying and resolving software issues

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.

4. Underpinning attitudes

- 4.1. Prompting to carrying out activities
- 4.2. Tidy and punctual
- 4.3. Sincere and honest concerning tasks
- 4.4. Concerned for client's rights
- 4.5. Accepts job is competitive in nature
- 4.6. Eager to learn
- 4.7. Observes netiquette
- 4.8. Concern about proper use of computer and peripherals

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. Internet
- 5.5. Tools, equipment and materials
- 5.6. Mobile phones
- 5.7. Schematic diagrams
- 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. Demonstration
- 6.3. Oral test
- 6.4. Observation
- 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:	Implement business practices
Unit Code:	SEIP-IT-MPS-05-O
Nominal Hours:	36 hours
Unit Descriptor:	This unit covers the skills, knowledge and attitudes required to apply business practices. It specifically includes applying business practices to mobile phone servicing, understanding customer service, and performing required gesture and posture during customer service.
Elements of Competency	Performance Criteria (<u>bold and underlined</u> terms are elaborated in the Range of Variables)
1. Apply business practice	<p>1.1. Idea of entrepreneurship is explained.</p> <p>1.2. Visual communication skills are identified and described.</p> <p>1.3. Time management skills are identified and described.</p> <p>1.4. Financial issues are identified and interpreted.</p> <p>1.5. Legal issues are identified and interpreted.</p>
2. Understand customer service	<p>2.1. <u>Customer service operation</u> is identified and described.</p> <p>2.2. Duties of a service provider are identified.</p> <p>2.3. <u>Customer service skills</u> are identified and defined.</p> <p>2.4. <u>Soft skills</u> required in customer service are identified</p>
3. Perform required gesture and posture during customer service	<p>3.1. Correct body language and posturing is employed during customer service interaction.</p> <p>3.2. Do's and don'ts of body language and posture during customer service interaction are identified.</p>

Range of Variables	
Variable	Range (<i>may include but not limited to</i>)
1. Customer service operation	<p>1.1. Receiving</p> <p>1.2. Taking history</p> <p>1.3. Problem finding</p> <p>1.4. Estimation</p> <p>1.5. Agreement with Client</p> <p>1.6. Complete task</p> <p>1.7. Delivery to client</p>

Range of Variables	
Variable	Range (may include but not limited to)
2. Customer service skills	2.1. Patience 2.2. Attentiveness 2.3. Respectfulness 2.4. Clear communication 2.5. Product or service knowledge 2.6. Positive language 2.7. Time management 2.8. Identifying needs 2.9. Calmness 2.10. Situational awareness 2.11. Persuasion 2.12. Tenacity 2.13. Closing
3. Soft skills	3.1. Social grace 3.2. Language 3.3. Friendliness 3.4. Personal habits 3.5. Optimism 3.6. Teamwork 3.7. Stress management 3.8. Responsibility 3.9. Self-esteem 3.10. Self-management

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.	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1. Implemented business activities 1.2. Explained good customer service 1.3. Demonstrated required gesture and posture
2. Underpinning knowledge	2.1. Entrepreneurship 2.2. Time management 2.3. Visual communication 2.4. Financial issues 2.5. Legal requirements 2.6. Customer service operations 2.7. Proper gesture and posture

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.

3. Underpinning skills	<ul style="list-style-type: none">3.1. Identifying and interpreting financial issues3.2. Identifying and interpreting legal requirements3.3. Performed required gesture and posture during customer service
4. Underpinning attitudes	<ul style="list-style-type: none">4.1. Prompting to carrying out activities4.2. Tidy and punctual4.3. Sincere and honest concerning tasks4.4. Concerned for client's rights
5. Resource implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none">5.1. Workplace (simulated or actual)5.2. Computer/laptop/notebook5.3. Software5.4. Internet5.5. Projector5.6. Stationary5.7. Learning manual
6. Methods of assessment	<p>Methods of assessment may include but is not limited to:</p> <ul style="list-style-type: none">6.1. Written test6.2. Demonstration6.3. Oral test6.4. Observation6.5. Portfolio
7. Context of assessment	<ul style="list-style-type: none">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.

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