

## NATIONAL COMPETENCY STANDARD

**FOR** 

# ELECTROCARDIOGRAPHY (ECG) ASSISTANT NVQ Level 3

(Competency Standard Code: N85S031)



#### Validated by;

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Endorsed by;
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State Ministry of Skills Development, Vocational Education, Research & Innovations

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First publication October 2021

Next Revision October 2024

#### Published by;

Tertiary and Vocational Education Commission

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#### **PREFACE**

National Competency Standards (NCS) and curricula are essential elements for the implementation of a unified Technical and Vocational Education & Training System for Sri Lanka and forms the basis for the National Vocational Qualifications Framework of Sri Lanka, which provides for the award of nationally and internationally recognized qualifications. The National Competency Standards are developed in consultation with the industry and are designed using a nationally agreed specific format to maintain uniformity and consistency of standards amongst occupations.

The NCSs and curricula specify the standards of performance of a competent worker and the various contexts in which work may take place. NCS describes the knowledge, skills and attitudes required in a particular occupation and signals what students must be able to do in employment and can ideally serve as a link between education and training and the needs of the labour market. NCS and curricula together provide explicit advice to assessors and employers regarding the knowledge, skills and attitudes to be demonstrated by the candidates seeking formal recognition for the competencies acquired either following training or through work experience.

National Competency Standards focus on that is expected of a worker in the workplace rather than on the learning process.

- NCSs stress upon the ability to transfer and apply knowledge and skills to new situations and environments.
- In NCS and curricula the emphases is upon outcomes and upon the application of knowledge and skills, not just the specification of knowledge and skills.
- NCS and curricula are concerned with what people are able to do and the ability to do a task in a range of contexts.
- NCS and curricula include all aspects of workplace performance and not only narrow task skills.

NCS especially can serve a number of purposes including;

- o Providing advice to curriculum developers about the knowledge, skills and attitude to be included in the curriculum.
- Providing specifications to Competency Based Assessors about the knowledge, skills and attitudes to be demonstrated by candidates.
- Providing advice to industry about job functions, which in turn can be used for the development of job descriptions, performance appraisal systems and work flow analysis. The lead organization for the development of NCS and curricula is the National Apprentice & Industrial Training Authority. The standards so developed are endorsed by the Tertiary & Vocational Education Commission as National Document.

There is a requirement to review the standards and curricula within the prescribed period as appropriate as and when required, with the assistance of relevant industry groups and incorporate the changes in the National Competency Standards and Curricula.

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# NATIONAL COMPETENCY STANDARD FOR

# Electrocardiography(ECG) Assistant NVQ Level 03

(Competency Standards Code N85S031)

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#### **Occupational Definition**

#### **Electrocardiography (ECG) Assistant**

Electrocardiography (ECG) assistant is the person who perform basic ECG recording procedures by using an ECG machine and accessories to record the impulses transmitted by a patient's heart under supervision of ECG technician. Data acquired by electrocardiography technicians assists physicians and cardiologists in diagnosing medical conditions of patients.

#### Personal attributes:

This job requires the individual to work in collaboration with Doctors, Nurses, ECG technician and other healthcare providers. They must have good communication skills to accurately report and document findings/results of their patients. They should be sensitive to the needs of the patient and be able to establish a good rapport with them.

#### **Duties:**

ECG assistant's job duties include performing ECG tests when requested by a physician.

As part of the testing process, an ECG assistant will

- Perform the ECG recording
- Prepare the patients and diagnostic equipment for the procedure
- Explain the procedure to the patient before the start of the process
- Handover of the reports to the patients after Physicians reporting
- Participation in the departmental quality initiatives
- To adhere to the safety norms of the hospital and follow both patient safety and staff safety rules.
- Observe infection control procedures

# NATIONAL COMPETENCY STANDARD FOR

# Electrocardiography (ECG) Assistant NVQ Level 03

(Competency Standard Code: N85S031)

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#### **Packaging for National Vocational Qualifications (NVQ)**

National certificate at NVQ Level 3 in the occupation of Electrocardiography(ECG)
 Assistant will be awarded to those who are competent in units U01 + U02 + U03 + U04 + U05 + BU01 + BU02 + BU03+ BU04- N85S031Q1L3

Unit Title:	Receive the Patient/Client and Check the Prescription	
Unit Descriptor:	This unit covers the competencies required to receive patient to initiate	
	electrocardiographic test following hospital administration requirements	
	and to check prescription or medical record	
Unit Code:	N85S031U01	
Element of	Performance Criteria	
Competence		
1. Carryout	1.1 Patient welcomed as per the organizational procedure or	
receiving the	standards of practice including health and safety procedures	
patient	1.2 Patient identified by referring medical records, prescription and	
	using other accepted identifiers specified by the organization.	
	1.3 Hospital administration requirements to initiate the test verified,	
	before commencing the test as specified.	
	1.4 Patient registered after the successful identification and satisfied	
	administration requirements and as per the SOP	
2. Check the	2.1 The medical record or reports of the patient checked as per the	
	client's need.	
medical history prescription/med	2.2 Patient checked to review appropriateness for the ECG	
ical records	procedure as specified.	
icai records	2.3 Any <i>abnormal situations</i> found ,reported to the immediate	
	supervisor as per SOP	
	Supervisor as per oor	

#### Range / Context:

Work connected to this unit may take place at a hospital or cardiac monitoring center and needs to follow organization working methods and institution, association or profession code of ethics and standards of practice. This unit may be performed individually.

Competencies in this unit also limited to basic electrocardiographic tests.

#### Elaboration of terms

Abnormal situations may include Vital signs, back problems

The following tools, equipment and material may be used in this unit;

#### **Tools and equipment**

• Facility for ECG procedure

#### Materials (Documents/References/Standards)

- Hospital administration procedure
- SOP
- Medical records

#### **Critical aspects**

The assessment must confirm that the candidate is able to;

- Identify patient by referring medical records
- Report abnormal situations
- Identify type of test requested for the patient.
- Follow health & safety procedures

#### **Underpinning Knowledge**

- Basic human anatomy physiology relevant to ECG procedure
- Medical Terminology
- ECG procedure
- Patient welcome procedure
- Patient identification procedure
- Hospital administration requirements
- Patient registration procedure
- Interpretation of medical record or reports
- Patient assessing procedure
- Organization working methods and institution, association or profession code of ethics and standards of practice
- Occupational health & safety procedure

#### **Underpinning Skills**

- Interpret prescriptions
- Record patient data like vital signs.
- Review and enter data into computer including age, name, medications etc
- Interact with the patient
- Give clear instructions to the patient and listen patiently
- Explain the purpose and clarify requirements of the patient during the test procedure
- Communicate with other people around the patient and give them clear instructions about their safety
- How to plan and organise activities related to registration procedures
- Communicate effectively with patients and family
- Identifying patient's complaints or diseases
- Apply and evaluate the information gathered from the report
- First aid and basic life supports
- Apply occupational health & safety practices

#### **Section 2- National Competency Standards**

- Self confidence
- Self-management
- Integrity and honesty
- Punctual and efficient
- Cooperative
- Self-motivated

Unit Title:	Prepare and Position the Patient for ECG Test	
Unit Descriptor:	This unit is about correctly positioning the patient for starting ECG test.	
	The purpose of proper positioning is to facilitate connecting the patient	
	to the ECG machine, at the same time ensure adequate patient comfort	
	and privacy while maintaining strict hygienic conditions.	
Unit Code:	N85S031U02	
Element of	Performance Criteria	
Competence		
1. Explain the	1.1 Verbal consent for the ECG test obtained from the patient as per	
Testing	the SOP	
Procedure	1.2 Requirement of exposure of upper body area explained to the	
	patient as per the SOP.	
	1.3 Requirement of shaving explained to the patient as appropriate.	
	1.4 Placing of leads on to the appropriate areas explained to the	
	patient as appropriate.	
2. Prepare patient for	2.1 Patients' privacy, strict safety and hygiene maintained as per the	
the procedure	specified protocol.	
	2.2 Place the patient supine position comfortably on the examination	
	bed as per specified manner.	
	2.3 Exposure of upper body and shaving the required area, (if	
	necessary) carried out as specified.	
	2.4 Any skin condition noted and any allergy to lubricant inquired into	
	from the patient.	
	2.5 Specified lubricant application and lead placing areas ensured as	
	specified.	

#### Range / Context:

Work connected to this unit may take place at a hospital or cardiac monitoring center and needs to follow organization working methods and institution, association or profession code of ethics and standards of practice. This unit may be performed individually.

Competencies in this unit also limited to basic electrocardiographic tests.

The following tools, equipment and material may be used in this unit;

#### **Tools and equipment**

- Equipment for shaving
- Examination bed, linen etc.
- ECG Machine, leads, lubricants

#### Materials (Documents/References/Standards)

- SOP (Standard Operating Procedure)
- Manufacturer's instructions

#### **Critical aspects**

The assessment must confirm that the candidate is able to;

- Ensure patients' privacy, strict safety and hygiene
- · Position patient as specified

#### **Underpinning Knowledge**

- Basic human anatomy physiology relevant to ECG procedure
- Medical Terminology
- Infection control policies and procedures
- Standard procedures
- Patient safety and comfort
- Patient positioning methods
- Lubricant application
- Placing leads
- Method of patient safety procedure
- Basic first -aid
- CPR procedure
- Occupational health and safety procedure
- ECG procedure
- Explaining testing procedure
- Patient positioning procedure
- Hospital administration requirements
- Exposure and shaving procedure
- Lubricant and application
- Lead placing procedure
- Organization working methods and institution, association or profession code of ethics and standards of practice
- Occupational health & safety procedure

#### **Underpinning Skills**

- Interpret prescriptions
- Shaving skills
- Interact with the patient in the local language
- Give clear instructions to the patient and listen patiently
- Explain the purpose and clarify requirements of the patient during the test procedure
- Communicate with other people around the patient and give them clear instructions about their safety
- How to plan and organize activities related to positioning procedures
- Communicate effectively with patients and family
- Inspect equipment to ensure proper working order
- Team work skills
- Apply infection control methods
- Apply first-aids
- Apply CPR
- Apply occupational health & safety practices

#### Worker behavior/Attitude/Soft skills

- Self confidence
- Self-management
- Integrity and honesty
- Punctual and efficient
- Cooperative
- Self-motivated

Unit Title:	Gather Equipment & Material and Check the Functionality	
Unit Descriptor:	This unit covers the competencies required to prepare ECG equipment	
	and material before the testing to ensure its proper functionality.	
Unit Code:	N85S031U03	
Element of	Performance Criteria	
Competence		
1. Prepare	1.1 ECG equipment and <i>material</i> collected as per the	
equipment and	organization working method.	
material	1.2 The instruction manual of the equipment referred when and	
	where required to ensure its operational procedure.	
	1.3 Sufficient electrical charge level of equipment checked as	
	specified.	
	1.4 Fixing of cables to the equipment checked as per the	
	instruction manual.	
	1.5 Sufficient length of ECG record papers ensured as specified.	
	1.6 Proper fixing of clips and knobs to the leads checked as per	
	the instruction manual.	
2. Check the	2.1 Calibration level for standard values checked against their	
Functionality of	specified figures	
the equipment	2.2 The limb leads and chest leads to be placed, checked as per	
	given instructions.	
	3	

#### Range / Context:

Work connected to this unit may take place at a hospital or cardiac monitoring center and needs to follow organization working methods and institution, association or profession code of ethics and standards of practice. This unit may be performed individually.

Competencies in this unit also limited to basic electrocardiographic tests

#### Elaboration of terms

*Material* may include: Bed, bed linen, pillow, locker, step-stool, lubricant, ECG thermal paper, bed paper roll, tissue roll, ECG folders, and power connections

**Standard values** may include: hight-10mm/mv, speed- 25 mm/s, A/C frequency changer (filter)- 20 to 35 Hz

#### The following tools, equipment and material may be used in this unit;

#### **Tools and equipment**

- Examination bed, linen etc.
- ECG Machine, patient cables (leads)

#### Materials (Documents/References/Standards)

- SOP
- Manufacturer's instructions
- Lubricants

#### **Critical aspects**

The assessment must confirm that the candidate is able to;

- Check electrical charge level of equipment
- Check calibration level for standard values

#### **Underpinning Knowledge**

- Basic human anatomy physiology relevant to ECG procedure
- Medical Terminology
- Infection control policies and procedures
- Standard operating procedures
- ECG procedure
- ECG equipment and material
- Electrical charge level of equipment
- Fixing of cables to the equipment
- Fixing of clips and knobs
- Calibration level for standard values
- Basic first –aid
- Cardio-Pulmonary Resuscitation (CPR) procedure
- Causes for interference with the ECG recording
- Organization working methods and institution, association or profession code of ethics and standards of practice
- Occupational health and safety procedure

#### **Underpinning Skills**

- Interpret prescriptions
- Interact with the patient
- Communicate with other people around the patient and give them clear instructions about their safety
- How to plan and organize activities related to positioning procedures
- Interpret instruction manuals
- Equipment charging skill
- Fixing cables
- · Check equipment and leads
- Inspect equipment to ensure proper working order
- Team work skills
- Apply infection control methods
- Apply first-aids
- Apply CPR
- Apply occupational health safety practices

#### Worker behavior/Attitude/Soft skills

- Self confidence
- Self-management
- Integrity and honesty
- Punctual and efficient
- Cooperative
- Self-motivated

Unit Title:	Carry-Out Patient Monitoring for Basic ECG	
Unit Descriptor:	This unit covers the competencies required to monitor patient using basic ECG test and submit ECG recording paper to the patient or specified place while ensuring adequate patient comfort, privacy and strict hygienic conditions.	
Unit Code:	N85S031U04	
Element of	Performance Criteria	
Competence		
1. Place Leads	1.1 Positions of placing leads identified as specified and	
	considering patient special requirements	
	1.2 Lubricants/ECG gel applied at the identified places as specified	
	1.3 Leads placed on the identified /prescribed positions	
2. Take	2.1 Required <i>patient information</i> included to the system	
Recordings	2.2 Functionality of leads monitored throughout the recording	
	2.3 Accuracy of placement of leads assured through the pattern of recordings	
	2.4 Printed paper of whole ECG properly folded and submitted to the patient or sent to the specified ward/places	
	2.5 Any <b>special type of ECG</b> request made by the clinician, taken and submitted to the patient or sent to the specified ward/places.	
3. Complete the	3.1 Leads removed and cleaned	
monitoring	3.2 Lubricated areas cleaned and patient released as per the	
procedure	3.2 Lubricated areas cleaned and patient released as per the prescribed procedure.	
	3.3 All details of ECG tests carried out, recorded and maintained in the appropriate register.	

#### Range / Context:

Work connected to this unit may take place at a hospital or cardiac monitoring center and needs to follow organization working methods and institution, association or profession code of ethics and standards of practice. This unit may be performed individually.

Competencies in this unit also limited to basic electrocardiographic tests

#### Elaboration of terms in performance criteria

**Positions of placing leads** may include: Limb Leads-upper limb, (left & right), lower limb, (left & right), Chest Leads-V1 to V6

**Special requirements** may include: wound, amputated limbs, abnormal heart positions (Right hand side)

Patient information may include: age, name, gender

Special type of ECG may include: 3 lead ECG strip

The following tools, equipment & material are included within this unit.

#### Tools and equipment

- Examination bed,
- ECG Machine.
- Patient cables

#### Materials (Documents/References/Standards)

- Linen, paper bed rolls etc.
- Tissue papers
- Lubricants
- Thermal paper ECG folders
- SOP
- Manufacturer's instructions
- Patient register

#### **Critical aspects**

The assessment must confirm that the candidate is able to:

- Place leads on correct positions
- Identify accuracy of lead placements as per the recording obtained
- Monitor the leads while ECG is being taken

#### **Underpinning Knowledge**

- Basic human anatomy physiology relevant to ECG procedure
- Medical Terminology
- Infection control policies and procedures
- Standard procedures
- ECG procedure
- ECG equipment and material
- Positions of placing leads
- Application of lubricants
- Placing leads
- Taking ECG in patients with wounds, legs and hands amputated.
- Functionality of leads
- Removing leads
- Basic first –aid
- (CPR) procedure

#### **Underpinning Skills**

- Interpret prescriptions
- Interact with the patient
- Communicate with other people around the patient and give them clear instructions about their safety
- How to plan and organize activities related to positioning procedures
- Leads handling and positioning skills
- Functionality monitoring skills
- Interpret instruction manuals
- Team work skills
- Apply infection control methods
- Apply first-aids
- Apply CPR
- Apply occupational health safety practices

#### **Section 2- National Competency Standards**

- Organization working methods and institution, association or profession code of ethics and standards of practice
- Occupational health and safety procedure

#### Worker behavior/Attitude/Soft skills

- Self confidence
- Self-management
- Integrity and honesty
- Advanced commonsense
- Punctual and efficient
- Cooperative
- Self-motivated

Unit Title:	Clean, Disinfect and Re-Arrange the Equipment and Room	
Unit Descriptor: Unit Code:	This unit is about the complying with infection control policies and procedures and It is applicable to health care workers who are responsible for workplace procedures to maintain Infection control and applies to all allied health professionals.  N85S031U05	
Element of	Performance Criteria	
Competence		
1. Identify the risk	1.1 Standard precautions to prevent the spread of infection identified	
	in accordance with organization requirements	
	1.2 Additional precautions identified when standard precautions alone	
	may not be sufficient to prevent transmission of infection,	
	especially in times of epidemics.	
	1.3 Activities and tasks that put patients and/or other health care	
	workers at risk identified, documented and reported.	
2. Follow	2.1 Hand hygiene maintained by washing hands before and after	
procedures for	patient contact and/or after any activity likely to cause	
risks	contamination.	
	2.2 Personal protective clothing and equipment wear that complies	
	with infection control standards	
	2.3 Protocols for care, following exposure to blood or other body	
	fluids followed as required and spills removed in accordance with	
	the policies and procedures of the organization	
	2.4 Records and materials kept as per SOP.	
3. Carryout waste	3.1 Waste disposed safely in accordance with policies and	
disposal	procedures of the organization and legislative requirements.	
	3.2 All work surfaces cleaned and dis-infected before and after each	
	session or when visibly soiled.	
	3.3 Equipment decontaminated requiring special processing in	
	accordance with infection control guidelines to ensure full	
	compliance with cleaning, disinfection and sterilization protocols.	
	3.4 Surface covers replaced where applicable and cleaning	
	equipment maintained and stored.	
	1 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	

#### Range / Context:

Work connected to this unit may take place at a hospital or cardiac monitoring center and needs to follow organization working methods and institution, association or profession code of ethics and standards of practice. This unit may be performed individually.

Competencies in this unit also limited to basic electrocardiographic tests

The following tools, equipment & material are included within this unit.

#### **Tools and equipment**

- Personal protective equipment
- Cleaning brushes

# Materials (Documents/References/Standards)

- Detergent
- Disinfectant
- Tissue papers
- Waste disposal containers
- SOP
- Infection control manual
- Material Safety Data Sheets (MSDS)

#### **Critical aspects**

The assessment must confirm that the candidate is able to:

Implement universal infection control measures.

#### Underpinning Knowledge

- Basic microbiology including: bacteria and bacterial spores, fungi and viruses
- The required actions and reporting procedures for any accidents, spillages and contamination
- The requirements of the relevant external agencies involved in the transport and receipt of waste
- The importance of segregating different types of waste and how to perform
- Organization working methods and institution, association or profession code of ethics and standards of practice

#### **Underpinning Skills**

- Consistently apply hand washing, personal hygiene and personal protection protocols
- Consistently apply clean techniques
- Consistently apply protocols to limit contamination
- Take into account opportunities to address waste minimization, environmental responsibility and sustainable practice issues
- Apply additional precautions when standard precautions are not sufficient

#### Worker behavior/Attitude/Soft skills

- Self confidence
- Self-management
- Integrity and honesty
- Punctual and efficient
- Cooperative
- Self-motivated

Unit Title :	Practice workplace communication and interpersonal relations
Unit Descriptor :	This unit covers the competencies required to co-operate with others, interact effectively and deal with information within the workplace.
Unit Code:	N85S031BU1
Element	Performance Criteria
Co-operate with others in performing work	<ul> <li>1.1 Work is performed in co-operation with others in a friendly &amp; courteous manner</li> <li>1.2 Verbal and non-verbal communication are used appropriately</li> <li>1.3 Ideas, opinions and interactions are shared &amp; respected consistently</li> </ul>
	1.4 Work is performed in co-operation with others and related staff
2. Work with people of diverse backgrounds	<ul><li>2.1 People of a variety of backgrounds are accepted without prejudice</li><li>2.2 Respect for cultural, ethnic and gender differences are practiced consistently</li></ul>
3. Obtain record and convey workplace information	<ul> <li>3.1 Effective questioning, active listening reading and speaking skills are used to gather information</li> <li>3.2 Information and ideas are transferred without distortion</li> <li>3.3 Work place interaction is conducted in a courteous manner</li> <li>3.4 Approved work instructions are obtained and followed in a methodical manner</li> <li>3.5 Collected information are recorded for future reference</li> </ul>
4. Fill work related documents	<ul> <li>4.1 Work related forms and formats is are identified</li> <li>4.2 Identified forms and formats perfected</li> <li>4.3 Reporting requirements to supervisor is completed accurately in accordance with Standard Operating Procedures (SOP) within stipulated time</li> </ul>

### Range/Context:

The performance of activities included in this unit may take place in workplace. Communication will include verbal, non-verbal, written, printed and electronic forms. It applies to individuals, groups and co-workers as well as other stakeholders connected with the work

#### The following tools, equipment & material are included within this unit.

# Tools/ instruments and Documents/References/Standards equipment

- Pens/pencils/rulers/calculator
- Paper/notebooks
- Telephones

- Charts
- Graphics
- Memos
- Formats & Forms (Time Record sheets, Quality record sheets and material order sheets)
- Standard Organizational Procedures and accepted ethical standards and norms

#### **Critical Aspects:**

The assessment must confirm that the candidate is able to;

- Obtain accurate information from superior/co-workers/stakeholders
- Accurate recording of information (Defects)
- Convey information to relevant parties accurately

#### **UNDERPINNING KNOWLEDGE**

- Safety symbols & procedures
- Basic English relevant to workplace and type of work
- Organization's rules, regulations and Standard Operation Procedures (SOP)
- General norms of polite conduct
- Forms of address appropriate to customers and persons in different positions
- Customer details and Organizational structure
- Basic knowledge of customer base and practices of different ethnic and religious groups
- Good telephone manners
- Basic understanding of gender issues
- Basic knowledge of modern trends in relevant field

#### **UNDERPINNING SKILLS**

- Speak clearly in mother tongue and express varied ideas
- Write clearly and legibly in mother tongue
- Read and understand simple English relevant to the workplace
- Read and understand workplace manual relevant to the field
- Write simple explanations in English language
- Communicate effectively using the telephone
- Perform simple calculations
- Make simple sketches

UNIT TITLE :	Apply occupational literacy and numeracy	
UNIT DESCRIPTOR :	This unit covers the competencies required to apply identified literacy and numeracy demands in the workplace to ensure and enhance smooth workflow	
UNIT CODE:	N85S031BU2	
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA	
Identify literacy and numeracy demands of the workplace	<ul> <li>1.1 Literacy requirements of workplace tasks, related documents and procedures are identified</li> <li>1.2 Numeracy requirements of workplace tasks, documents and procedures are identified</li> </ul>	
2. Apply a range of skills that support workplace literacy and numeracy	<ul> <li>2.1 Identified literacy requirements are applied to workplace as and when required</li> <li>2.2 Identified numeracy requirements are applied to workplace as and when required</li> </ul>	

#### Range/Context:

Performance related to this unit may take place at workplace and training centre. Activities included in to this unit performed as an individual or member of a team.

#### Elaboration of terms

- Literacy requirements of workplace in PC 1.1 may include:
  - reading skills to understand written information, such as signs, work instructions, policies, procedures, legislation, specifications, checklists and reports
  - writing skills to complete or produce written texts, such as emails, checklists, work record sheets, safety or reports and SMS
- Numeracy requirements of workplace in PC 1.2 may include:
  - add, subtract, multiply and divide
  - locate information in tables, use numbers, read various scales and gauges, use calculations (such as determine weight of load, quantity)
  - record and interpret data, such as forms and checklists

#### **Critical Aspects:**

The assessment must confirm that the candidate is able to;

- Interpret written material accurately
- Convey ideas clearly and correctly in writing
- Adopt appropriate method in mathematical calculations

#### The following tools, equipment, material and documents are included within this unit.

Tools/ instruments and equipment

Documents/References/Standards

- Pens/pencils
- Paper/notebooks
- Calculator
- Geometrical Instruments
- Measuring tapes
- Compass

- Charts
- Manuals
- Memos
- Formats & Forms (Time Record sheets, Quality record sheets, and material order sheets)
- Accepted rules of grammar and syntax

#### Required Knowledge, Skills and Worker behavior/Attitude/Soft skills

#### Knowledge **Skills**

- Literacy requirements of workplace
- Numeracy requirements of workplace
- Features of literacy and numeracy
- Literacy and numeracy demands of everyday workplace tasks, documents and procedures
- Benefits of literacy and numeracy skill development in the workplace
- Basics of Geometry

- Learning skills to identify the broad literacy and numeracy skills that underpin workplace tasks
- Reading skills to read routine workplace documents
- Planning and organizing skills to apply strategies to support workplace literacy and numeracy
- Self-management skills to apply strategies to support workplace literacy and numeracy
- Perform calculations
- **Draw Geometrical views**

UNIT TITLE :	Work in team	
UNIT DESCRIPTOR :	This unit covers the competencies required to achieve, maintain, and enhance the team goals, sprit and team responsibilities	
UNIT CODE:	N85S031BU03	
ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA	
Communication     with team     members	1.1 <b>Effective communication strategies</b> are followed in preventing misunderstanding and enhancing clarity while mitigating gender & culture differences	
	1.2 Information and ideas are shared with team members to enhance work outcome	
2. Participate in team work activities	<ul> <li>2.1 Individual tasks &amp; goals are communicated to team members according to the work plan agreed</li> <li>2.2 Periodic meetings are conducted by team leader to evaluate the progress of the team and the members.</li> </ul>	
	2.3 Other team members are encouraged and supported in undertaking required roles and responsibilities	

#### Range/Context:

Performance related to this unit may take place at workplace and training centre. Activities included in to this unit performed as an individual or member of a team.

#### **Elaboration of terms**

- Effective communication strategies in PC 1.1 may include:
  - active listening
  - questioning
  - observing
  - giving feedback
  - empathy
  - Interpreting body language

#### **Critical Aspects:**

The assessment must confirm that the candidate is able to;

- Support to achieve team goals and individual goals
- Follow designated work plan for the job
- Make / support appropriate decisions respecting to other's ideas
- Motivate / be motivated to achieve team goals

The following tools, equipment, material and documents are included within this unit.

Tools/ instruments and equipment

Documents/References/Standards

- Depending on the job assigned to the team for the purpose of assessing this unit, required tools, equipment and material will be provided
- Work plans
- Manuals
- Standard Operational Procedures
- Handbooks
- General rules and norms guiding team behaviour

#### Required Knowledge, Skills and Worker behavior/Attitude/Soft skills

### Knowledge Skills

- Simple concepts of team behaviour
- Elementary group dynamics
- Knowledge of Standard Organizational Procedures (SOP), work instructions and relevant regulatory requirements
- Motivational theories
- Methods of appreciating team members achievements
- Methods of mentoring and coaching team members

- Encouraging team members
- Following instructions
- Demonstrating interpersonal skills
- Listening and using a variety of communication skills
- Providing suggestions and information
- Reporting information
- Contributing to the achievement of tasks consistent with agreed goals
- Skills of appreciating team members achievements
- Skills of mentoring and coaching team members

Unit Title :		Practice occupational health and safety procedures in an workplace				
Unit Descriptor :  Unit Code:	This unit describes the performance outcomes required to identify and follow safety and emergency procedures in workplace.  It involves those health and safety procedures to be followed when using ECG machine, and materials.  It includes the individual's responsibility for safety and emergency response in the event of an accident or incident.  N85S031BU04					
Element	Porfo	rmance Criteria				
1. Identify and follow workplace safety procedures	1.1	Work place procedure relating to personal safety are identified and followed				
	1.2	Unsafe situations and hazards/risks are identified and reported according to workplace procedures				
	1.3	Equipment breakdowns are identified and reported according to workshop procedures				
	1.4	Fire hazards are identified, different fire protection equipment and material and their methods of use identified as required for different types of fires				
	1.5	Work place procedures and safety requirements for handling hazardous materials are identified and followed				
	1.6	Manual handling procedures and ergonomic parameters are identified and followed				
	1.7	Health and Safety awareness programmes are participated				
	1.8	Appropriate PPE used/ worn according to organisation's requirements & manufacturer's instructions				
	1.9	First aid and CPR procedures performed as needed				
	1.10	Daily and weekly safety & health check list followed as per organization requirement				
2. Identify and follow workplace emergency	2.1	Physical, electrical, chemical and biological hazards recognized, identified and reported promptly.				
procedures	2.2	Workplace emergency procedures regarding illness and accidents are identified and followed				
	2.3	Safety warning alarms and workplace evacuation procedures, emergency protection area and fire exits are identified and followed				
	2.4	Firefighting appliances and equipment are located and identified for emergency use and application				
	2.5	<b>Relevant persons</b> are identified for contacting in the event of an incident, accident or sickness of self, co-workers, staff, customers and others				

2.6				documentation	requirements	are
followed work place procedures						

#### Range/Context:

Activities included in this unit may take place in a work place, and will include but not be limited to identifying potential hazards, taking effective preventive action to control or minimise such hazards, using personal protective equipment, using fire extinguishers and maintaining records of safety related activities.

#### **Elaboration of terms:**

#### Workplace procedures must include procedures for:

- Selecting and using personal protective equipment (PPE)
- Identifying hazards
- Emergency, fire and accident
- · Regular cleaning of uniforms as specified.

#### Relevant persons must include:

Those holding a current recognized qualification in any of the following:

- First aid
- Cardiopulmonary resuscitation
- Fire warden and workplace evacuation
- Occupational or work health and safety representative.

#### **Critical Aspects:**

- Identify potential hazards
- · Adhere to safety procedures
- Current Cardiopulmonary resuscitation technics.

#### The following tools, equipment & material are included within this unit.

#### **Tools/ instruments and equipment**

- Safety signs and symbols
- Posters
- PPE
- First aid box with essential items
- Fire protection equipment

#### **Documents/References/Standards**

- Organisation's health & safety procedure manual
- Equipment manual issued by manufacturer

#### **Underpinning Knowledge Underpinning Skills** Individuals must be able to demonstrate Learning skills to: knowledge of: Locate sources of information relating to basic aspects of relevant OHS legislation, safety requirements. including: Reading skills to: Employer responsibilities for Interpret information from manufacturer and workplace literature when seeking procedures required Employee responsibilities to carrying out work safely. participate in health and safety Writing skills to: practices Legibly and accurately enter information into Employee responsibility to ensure own work place safety documents and check work practices protect the safety of sheets. self, other workers and other people in Oral communication skills to: the workplace Clarify instructions inform personnel of work manual handling, including: place hazards. Using correct lifting techniques and Planning and organizing skills to: equipment Plan own work requirements to achieve required outcomes while working according to work place practices, including: Housekeeping safety requirements. Self-management skills to: Observing personal hygiene Follow work place safety requirements without Identifying slip hazards and trip constant supervision identify and look after hazards own safety. Prevention of electrical Hazards emergency procedures, including: Personnel responsibilities Evacuation procedures and assembly points.

## **Section 3**

# COMPETENCY BASED TRAINING CURRICULUM FOR

# FOR THE OCCUPATION OF

## **Electrocardiography(ECG) Assistant**

#### **NVQ Level 3**

List of	Curriculum Modules	Module Code No	Duration (Hours)		Page
1.	Section 2: Curriculum		Theory	Practical	
1.	Introduction to Healthcare	N85S031M01	20	20	31
2.	Basic Human Anatomy and Physiology	N85S031M02	45	30	32
3.	Fundamentals of ECG	N85S031M03	20	40	33
4.	Preparing and Positioning the Patient for ECG	N85S031M04	10	30	35
5.	ECG Procedure	N85S031M05	30	75	36
6.	Infection Control Policies and Procedure	N85S031M06	20	30	37
7.	Communication skills for workplace	N85S031BM01	21	21	38
8.	Calculation & Basic Science	N85S031BM02	12	06	39
9.	Team work	N85S031BM03	21	21	40
10.	Occupational health and safety procedures and practices	N85S031BM04	24	24	41
	Total Duration		52	20	

## **Competency Profile**

leads

COMPETENCY AREAS ← COMPETENCIES ← C

COMPETENCY A	TENCY AREAS COMPETENCIES				
A. Receive the Patient and Prepare the Patient for ECG Test	A1. Welcome patient	A2. Identify patient	A3.  Describe  Hospital  administration  requirements	A4. Register patient	A5 Check medical record, prescription or reports
	A6 Obtain consent for the ECG test	A7 Explain requirement of exposure of upper body area	A8 Explain Placing of leads on to the appropriate areas	A9 Place the patient in supine position comfortably	A10 Carry out exposure of upper body and shaving the required area
	A11 Apply Specified lubricant	A12 Place leads of the ECG machine			
B. Gather Equipment & Material and Check The Functionality	B1 Collect ECG equipment and material	Refer the instruction manual of the equipment	equipment	B4 check the leads are fixed	B5 Check the calibration level
	B6 Check the limb leads and chest leads				
C. Carry-out patient Monitoring for basic ECG	Identify Positions	Apply Apply ubricants/ECG gel	C3 Place leads	C4 Include Required patient information	C5 Check accuracy of placement of leads
Operate the ECG machine and monitor functionality of	C7 Remove leads	C8 Clean Lubricated areas			

Section 3- Competency Based Training Curriculum

D. Clean,	D1	D2	D3	D4	D5	D6
Disinfect	Wear	Identify	Perform	Perform	Remove	Maintain
and Re-	personal	infection	standard	additional	spill	hand
arrange	protective	risks and	precautions	precautions		hygiene
the	clothing	implement	to prevent	if		
equipment	and	an	the spread	necessary		
and room	equipment	appropriate	of infection			
		response				

D7	D8	D9	D10
Dispose waste	Clean all work	decontaminate	replace surface
	surfaces	equipment	covers

## **Programme Structure**

	Competency Area	Module		Competencies	Time
					(Hours)
	Basic Module (Technical)	M 01	Introduction to Healthcare		40
	Basic Module (Technical)	M02	Basic Human Anatomy and Physiology		75
	Basic Module (Technical)	M03	Fundamentals of ECG		60
A	Receive the Patient and Prepare the Patient for ECG Test	M 04	Preparing and Positioning the Patient for ECG	A-1 to A-12	40
В	Gather Equipment & Material and Check The Functionality  Carry-out patient Monitoring for basic ECG	M05	ECG Procedure	B-1 to B-6 C-1 to C-8	105
С					
D	Clean, Disinfect and Re-arrange the equipment and room	M06	Infection Control Policies and Procedure	D-1 to D-10	50
	Basic Units (Soft Skills)	BM01	Communication skills for workplace		42
		BM02	Calculation & Basic Science		18
		BM03	Team work		42
		BM04	Occupational health and safety procedures and practices		48

## **Mapping Table**

	Relevant Units	Relevant Modules	Relevant Tasks
N85S031Q1L3	N85S031U01	N85S031M01	A-1 to A-12
	N85S031U02	N85S031M02	B-1 to B-6
	N85S031U03	N85S031M03	C-1 to C- 8
	N85S031U04	N85S031M04	D-1 to D-10
	N85S031U05	N85S031M05	
	N85S031BU01	N85S031M06	
	N85S031BU02	N85S031BM01	
	N85S031BU03	N85S031BM02	
	N85S031BU04	N85S031BM03	
		N85S031BM04	

Section 3- Competency Based Training Curriculum

Module Title	Introduction to Healthcare			
Module Code	N85S031M01			
Module Type	Basic Module (Technical)			
Duration (Hrs)	40 Hours (Theory 20– & Practical -20)			
Learning	After completion of this module the trainee will be able to:			
Outcomes	Describe the overview of the occupation			
	Describe health sector professions, terminology and ethical practices			
Learning Content	Theory			
	Introduction to the course			
	Evolution of medicine – overview			
	Role of Allied Health Professionals			
	Medical Specialties			
	Role of the ECG Technician			
	Purpose of Electrocardiograms.  Occupational everying.			
	Occupational overview     Corpor outlook			
	Career outlook     Madical Tarminalagy and tarminalagy appainted with ECCs.			
	Medical Terminology and terminology associated with ECGs     Low policy and Ethical practice in healthcare.			
	Law, policy and Ethical practice in healthcare  Description of the product o			
	Professional principles and values in healthcare			
	Practical			
	Role play: scenario based on ethical practice			
	Group Assignment: prepare a brief report including medical			
	terminology related to			
	<ul> <li>Cardiology</li> </ul>			
	o ECG			
	<ul> <li>Admission procedure</li> </ul>			
Teaching-	Lectures			
Learning	Assignments			
activities	Discussions			
	Presentations			
Forms of	Formative Assessment & Summative Assessment			
assessment				

Section 3- Competency Based Training Curriculum

Module Title	Basic Human Anatomy and Physiology			
Module Code	N85S031M02			
Module Type	Basic Module (Technical)			
<b>Duration (Hrs)</b>	75 Hours (Theory –45 & Practical -30)			
Learning	After completion of this module the trainee will be able to:			
Outcomes	Describe organ systems within the body			
	Identify organs and body system using diagrams			
Learning Content	Theory			
	Brief introduction to the organ systems within the human body			
	and their functions			
	Cells, tissue & muscles			
	<ul> <li>Body fluids</li> </ul>			
	Skelton system			
	Circulatory system			
	Respiratory system			
	Nervous system			
	Digestive system			
	<ul><li>Urinary system</li></ul>			
	Re-productive system			
	o Immune system			
	Integumentary system			
	Five sensors			
	Anatomy and physiology of cardiac system			
	<ul> <li>Structure and Function of the heart</li> <li>Physiological disorder of circulatory system</li> </ul>			
	Practical			
	Group Assignment: identify organs and body system using diagrams, submit a brief report on cardiac system			
Teaching-	Lectures			
Learning	Assignments			
activities	Discussions			
	Presentations			
Forms of	Formative Assessment & Summative Assessment			
assessment	Formative Assessment & Summative Assessment			
assessineil				

Module Title	Fundamentals of ECG		
Module Code	N85S031M03		
Module Type	Basic Module (Technical)		
Duration (Hrs)	60 Hours (Theory –20 & Practical -40)		
Learning	After completion of this module the trainee will be able to:		
Outcomes	Describe The heart and the electrocardiogram		
	Describe vital signs		
	Describe the electrocardiograph		
	Handle ECG equipment		
Learning Content	Theory		
	The heart and the electrocardiogram		
	Electrophysiology		
	Fundamentals of electricity		
	Electrical Conduction in the Heart		
	<ul> <li>Triangular representations of the heart positions</li> </ul>		
	Heart inclination and angle		
	Vital signs		
	<ul> <li>Blood Pressure Basics</li> </ul>		
	o Pulse rate		
	<ul> <li>Respiration</li> </ul>		
	<ul> <li>Temperature</li> </ul>		
	<ul> <li>Oxygen saturation</li> </ul>		
	The systolic and diastolic phases of the heart		
	The muscles of the heart		
	Cardiac conduction system		
	ECG-Electrocardiograph		
	<ul> <li>The generation of ECGs</li> </ul>		
	<ul> <li>Classification by function</li> </ul>		
	<ul> <li>Classification by power supply system</li> </ul>		
	Automatic analyzing system		
	Electrocardiogram leads		
	<ul> <li>Unipolar chest leads</li> </ul>		
	<ul> <li>The corresponding part of each lead</li> </ul>		
	Reading an ECG		
	Basic ECG waveforms		
	<ul> <li>Definition of waves</li> </ul>		
	<ul> <li>Normal heart and variations</li> </ul>		
	<ul> <li>Judgment for variations</li> </ul>		
	Classification of ECG equipment		
	Electrocardiograph handling instructions		
	o Identify controls		
	<ul> <li>Setting the controls</li> </ul>		
	<ul> <li>Power code connection and paper loading</li> </ul>		
	<ul> <li>Adjusting waveform</li> </ul>		
	Practical		
	Check and record vital signs		

### Section 3- Competency Based Training Curriculum

	<ul> <li>Group Assignment:</li> <li>Prepare equipment and check its functionality</li> <li>Reflective approaches in person centered practice</li> <li>Brief report on basic ECG waveforms and definition of waves</li> <li>Discuss the points of judgment of wave pattern variations referring waveform</li> </ul>
Teaching- Learning activities	<ul> <li>Lectures</li> <li>Assignments</li> <li>Discussions</li> <li>Presentations</li> </ul>
Forms of assessment	Formative Assessment & Summative Assessment

Module Title	Preparing and Positioning the Patient for ECG		
Module Code	N85S031M04		
Module Type	Core Module		
Duration (Hrs)	40 Hours (Theory –10 & Practical -30)		
Learning Outcomes	<ul> <li>After completion of this module the trainee will be able to:</li> <li>Describe the purpose of proper positioning of the patient</li> <li>Interpret the prescription</li> <li>Position the patient</li> </ul>		
Learning Content	<ul> <li>Welcome patient</li> <li>Patient identification</li> <li>Hospital administration procedure for test</li> <li>Patient registration procedure</li> <li>How to interpret medical records and prescription</li> <li>Patient appropriateness for the ECG procedure</li> <li>Patent preparation:</li> <li>Patients' privacy, strict safety and hygiene</li> <li>Patient relaxation and its importance</li> <li>Suitable clothing</li> </ul>		
	Exposure of upper body and shaving     Identify positioning of chest electrodes  Practical		
	Group Assignment: Role play on patient welcome and registration procedure Role play on patient positioning and preparing procedure Brief report about positioning and places of chest electrodes with diagrams		
Teaching- Learning activities	<ul> <li>Lectures</li> <li>Assignments</li> <li>Discussions</li> <li>Presentations</li> </ul>		
Forms of assessment	Formative Assessment & Summative Assessment		

Module Title	ECG Procedure			
Module Code	N85S031M05			
Module Type	Core Module			
Duration (Hrs)	105 Hours (Theory –30 & Practical -75)			
Learning	After completion of this module the trainee will be able to:			
Outcomes	Explain the ECG procedure			
	Carry-out ECG tests			
	Follow post-test procedure			
Learning Content	Theory			
	Infection control policies and procedures			
	<ul> <li>Patient safety and comfort</li> </ul>			
	Insert patient information			
	·			
	<ul> <li>Consider special requirements of the patient</li> <li>wound, amputated limbs, abnormal heart positions</li> </ul>			
	Patient positioning methods			
	Lubricant application			
	Placing leads			
	Connecting patient cables			
	Functionality of leads			
	The state of the s			
	Accuracy of placement of leads     Consequence			
	ECG recording     Superimposing of ways forms			
	Superimposing of wave forms     Post recording procedure			
	<ul> <li>Post –recording procedure</li> <li>Remove all electrodes</li> </ul>			
	Clean all lubricants			
	Assist the patient			
	<ul> <li>Cleaning electrodes</li> </ul>			
	Readiness for next ECG			
	o readmost for floor 200			
	Responding for emergencies			
	Practical			
	Group Assignment:			
	ECG in actual situation			
	Interpret recordings			
	Carry out post recording procedure			
Teaching-	Lectures			
Learning	Assignments			
activities	Discussions			
	Presentations			
Forms of assessment	Formative Assessment & Summative Assessment			

Module Title	Infection Control Policies and Procedure			
Module Code	N85S031M06			
Module Type	Core Module			
<b>Duration (Hrs)</b>	50 Hours (Theory –20 & Practical -30)			
Learning	After completion of this module the trainee will be able to:			
Outcomes	Describe the chain of infection			
	Carry-out disinfection procedure			
Learning Content	Basic microbiology including: - bacteria and bacterial spores,  fundi and virus etc.			
	fungi and virus etc.  Prevention and control of spreading of infections  Respiratory infection eg. Covid-19 Common communicable diseases  Infection risks and implement an appropriate response Care following exposure to blood or other body fluids Hand hygiene and it's importance Personal protective equipment (PPE)  The required actions and reporting procedures for any accidents, spillages and contamination due to wounds or skin lesions  The importance of segregating different types of waste and discarding procedure Universal health precautions			
	Practical			
	<ul> <li>Assignment: <ul> <li>List down possible risks in a health unit</li> <li>Propose methods for prevention and control of spreading of infections</li> <li>List down the activities and tasks that put patients and/or other health care workers at risk</li> <li>Waste segregation and disposal procedure</li> <li>Demonstrate the hand hygiene methods</li> </ul> </li> </ul>			
Teaching- Learning activities	<ul> <li>Lectures</li> <li>Assignments</li> <li>Discussions</li> <li>Presentations</li> </ul>			
Forms of assessment	Formative Assessment & Summative Assessment			

Module Title	Communication Skills for Workplace			
Module Code	N85S031BM01			
Module Type	Basic module			
Duration (Hrs.)	42 Hours (Theory - 21 & Practical- 21)			
Learning	After completion of this module the trainee will be able to:			
Outcomes	-communicate ideas and information at the workplace effectively			
Learning	Theory:			
Content	Listening skills			
	Telephone etiquettes			
	Presentation skills			
	Verbal and non-verbal communication			
	Safety symbols & procedures			
	Basic English relevant to workplace and type of work			
	Organization's rules, regulations and procedures			
	General norms of polite conduct			
	Forms of Different manner of address appropriately to			
	customers, superior and subordinates and persons in			
	different positions			
	Customs and practices of different ethnic and religious			
	groups  Conder incure relevant to the communications			
	Gender issues relevant to the communications     Trends in related technology			
	Trends in related technology     Friendlings through a friendly tope a personal question			
	Friendliness through a friendly tone, a personal question,     or simply a smile, appearing a superly are to appear in open.			
	or simply a smile, encourage coworkers to engage in open			
	and honest communication			
	Respect – convey respect for others and their ideas  Practical:			
	Role plays and dramas			
	1 Noie plays and dramas			
Teaching-	Illustrated talk			
Learning	Demonstrations			
activities	Individual practices			
	Assignments			
	•			
	Prepare a list of 100-150 technical/vocational terms     Footbale passet in FOO technical passet			
	in English used in ECG taking process			
	<ol><li>Collect manufactures' guidelines/work instructions operation manuals related in ECG taking process</li></ol>			
Forms of	Formative Assessment + Summative Assessment			
assessment				

Module Title	Calculation & Basic Science			
Module Code	N85S031BM02			
Module Type	Basic Module			
<b>Duration (Hrs)</b>	18 Hours (Theory - 12 & Practical- 06)			
Learning	After completion of this module the trainee will be able to:			
Outcomes	- perform basic arithmetic in the workplace when and where required			
	- interpret appropriate codes, abbreviations and symbols			
	- use basic computer applications			
Learning Content				
Learning Content	Theory			
	Basic Arithmetic.			
	Units and measurements			
	Conversion from metric to BS and vice versa).			
	Measuring instrument: Description, care & use of: -     Measuring tape, Measuring cup and Measuring scale			
	Basic electricity: Electricity principles, Ground connections, Voltage, Current, Resistance			
	Description of Chemical effects:			
	Practical			
	Basic Calculations			
	Measuring Practices			
Teaching-	Illustrated talk			
Learning	Show video clips			
activities	Demonstrations			
Forms of	Formative Assessment + Summative Assessment			
Forms of	Formative Assessment + Summative Assessment			
assessment				

Module Title	Team Work		
Module Code	N85S031BM03		
<b>Duration (Hrs)</b>	42 Hours (Theory - 21 & Practical- 21)		
Module Type	Basic Module		
Learning Outcomes	At the end of this module student should be able to;		
	<ul> <li>contribute positively to the work in team environment</li> <li>work effectively with others in a socially diverse environment</li> <li>respect and understand the views of others</li> <li>give, receive and act upon feedback</li> <li>identify and describe own roles and roles of others</li> </ul>		
Learning Content	<ul><li>Theory:</li><li>Simple concepts of team behavior</li><li>Elementary group dynamics</li></ul>		
	Basic knowledge in social and demographic structures		
	Practical  Identify and establish team purpose, team member's roles and responsibilities.  Coach and motivate team.  Assignments  Form a group for workplace cleaning, waste disposal and give the feedback on group effort 2. Arrange sports activities / social events		
Teaching-Learning activities	<ul> <li>Assignments</li> <li>Lecturers</li> <li>Role plays</li> <li>Case studies</li> <li>Team building activities</li> <li>Coaching and mentoring</li> </ul>		
Forms of assessment	Formative Assessment + Summative Assessment		

Module Title	Occupational Safety & Health			
Module Code	N85S031BM04			
Module Type	Basic Module			
Duration (Hrs)	48 Hours (Theory - 24 & Practical - 24)			
Learning	After completion of this module the trainee will be able to:			
Outcomes	- describe importance of safety and health			
	-work safely in procedures related ECG taking procedures			
	- arrange the place to minimize the risk			
	- avoid unsafe situations and hazards/risk			
Learning Content	Theory			
	Importance of safety and universal precautions to be			
	observed in the workplace.			
	Safety signs - for danger, warning, caution & personal			
	safety message			
	Safe handling of blood and body fluid spillage			
	, , ,			
	Fire extinguishers used for different types of fire.			
	safe disposal of waste			
	Proper use of Personnel Protecting Equipment (PPE)			
	Avoiding unsafe acts and conditions			
	Evacuation procedures and emergency protection area &			
	fire exists			
	Types of hazards and hazards control practices and			
	procedures			
	Ergonomic parameters			
	Manual handling procedures			
	Accidents and incidents documentation			
	Importance of periodical medical checkups			
	Energy Conservation			
	Practical			
	Use of Personnel Protective Equipment (PPE)			
	Maintenance and cleanliness of Workplace			
	Demonstration on First aid			
	Fire safety and use of fire extinguishers.			
	Demonstration safety disposal of waste materials			
Teaching-	Illustrated talk			
Learning				
activities	Show video clips  Demonstrations			
	Demonstrations			
Forms of	Formative Assessment + Summative Assessment			
assessment				

#### **Assessment Guide:**

#### Forms of assessment

Assessment shall be based on evidence collected through workplace performance or a combination of evidence collected through training and work place performance.

#### Assessment context

This unit may be assessed on the job, off the job or a combination of on and off the job. The unit should be assessed individually.

#### **Assessment conditions**

The candidate will have access to:

- all tools, equipment, material and documentation required.

The candidate will be permitted to refer the following documents:

- material, safety data sheets
- health and safety regulations
- Goods and material data sheet (PDS)
- company specification sheets
- manufacturer's instructional brochures and manuals / Operator's hand book

The candidate will be required to:

- Orally or by other methods of communication, answer questions asked by the assessor.
- Identify superiors and clients who can be approached for the collection of competency evidence where appropriate.
- Present evidence of credit for any off job training related to this unit.

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria and that he/she possess the required underpinning knowledge.

### **Special notes**

During assessment, the candidate will;

- demonstrate safe work practices at all times
- Communicate information about processes, events or tasks being undertaken to ensure a safe and efficient working environment.
- perform all tasks in accordance with standard operating procedures.
- perform all tasks to specifications
- take responsibility for the accuracy of his/her own work
- Use accepted methods for calculation.

Tasks involved will be completed within reasonable time frames relating to typical workplace activities.

#### Resources required for assessment

These include material, tools and equipment listed within this unit

# Tools, material and equipment require for the training program (Approximately 15 students)

No	Item	Quantity
1.	Examination bed	1
2.	Bed sheets	2
3.	Pillow cases	3
4.	ECG Machine	1
5.	Equipment for shaving (kit)	3
6.	ECG Gel (Lubricants)	3
7.	Personal protective equipment	5
8.	Cleaning brushes (small brushes)	1
9.	Tissue papers for cleaning	25
10.	Tissue Bed rolls (for bed)	10
11.	Thermal paper	20
12.	ECG folders	25
13.	Sink	1
14.	Hand wash	3 bottle
15.	Sanitizer bottles	2
16.	Stapler machine, pin	2
17.	Pen	15
18.	Gloves	30
19.	Chair and small cupboard	1
20.	Stool	1
21.	Power cable with switch	1
22.	Waste bins	3

# NATIONAL COMPETENCY STANDARD FOR

Electrocardiography (ECG) Assistant (Competency Standard Code: N85S031)

# NATIONAL CERTIFICATE AT NVQ LEVEL 3 IN THE OCCUPATION OF Electrocardiography (ECG) Assistant

Electrocardiography (ECG) Assistant			
1. Endorsement date: 05.10.2021		2. Date of review: 05.10.2024	
3. Purpose of the Qualification	,	To certify that the holder of this qualification has acquired the competencies contained in the units listed in section 5 below.	
4. Regulations for the Qualification/s		The holder should have been assessed by a licensed assessor and found competent in the units listed in section 5 and certified by the TVEC.	
5. Qualification Code 8 Packages		Included in the Page no. 2	
6. Prerequisite		Physically able to carry out the intended activity and required literacy and numeracy level for the occupation.	
7. Accreditation Requirement	accreditation re	The qualifications shall be offered in compliance with the accreditation requirements of the TVEC as stipulated in the National Vocational Qualifications framework of Sri Lanka.	
8. Certification		TVEC shall certify the qualifications in terms of the regulation at section 4 above	
9. Transition Arrangements	•	The competency-based assessments shall be undertaken by the registered assessors until TVEC arranges to issue licenses to the assessors.	
10. Requirement of conducting Knowledge Assessment	Not Required	Not Required	
11. Contact for Comments	•	onal Apprentice & Industrial Training Authority, 971, napura Mawatha, Welikada, Rajagiriya.	
		Director General, Tertiary & Vocational Education Commission,354/2, Nipunatha Piyasa, Elvitigala Mawatha, Colombo 05	