**COMPETENCY BASED STANDARD**

**INFORMATION AND COMMUNICATIONS**

**TECHNOLOGY SECTOR**



**COMPUTER OPERATION**

**Job Title**

**41, 33**

**Second Strengthening Technical and Vocational Education and Training (SSTVET) Project**

**ADB Grant 0503-LAO**

**CERTIFICATE LEVEL 1 | DRAFT VERSION 1 | JANUARY 2018**

**LAO PDR**

##### Occupation Area: Information Communications Technology

**41XX.XX, 3341.1**

**Job Title: Computer OPERATION & Related Jobs**

**Competency Standard: ICT Certification level 1**

**Nlvqf: 1**

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# Foreword

The 1991 Constitution of the Lao People’s Democratic Republic (Revised 2003), in Article 22 of the Lao PDR Constitution states: “The State attends to developing education and implements compulsory primary education in order to build good citizens with revolutionary competence, knowledge and abilities.” In addition, “The State and society attend to developing high quality national education, to create opportunities and [favorable] conditions in education for all people throughout the country, especially people in remote areas, ethnic groups, women and disadvantaged children.”

In Article 27 of the Lao PDR Constitution state: “The State and society attend to developing skilled labor, upgrading labor discipline, promoting vocational skills and occupations and protecting the legitimate rights and benefits of workers.”

Education for All 2015 National Review, The Technical and Vocational Education and Training (TVET) is clearly specified as one of the four sub‐sectors of the education system in the revised version of the Education Law of Lao PDR promulgated in July 2007. The TVET is divided into three levels: primary or first level (at upper secondary level), middle level and high level (at post‐secondary level. Thus TVET belongs partly to upper secondary education and partly to post‐secondary education, which is formally part of higher education according to the definitions.

The government of Lao PDR recognizes education’s importance in achieving national development goals. The country relies heavily on external funding, however, it has shown improvements in recent years. According to government figures, in 2013/14, the education share of the government budget was 15.5%, up from 13.4% in 2009/10.

The country has made significant progress, achieving 98.6% primary net enrollment and a gender parity rate of .99 for primary education. The major challenges that the education system faces are: reducing the high grade 1 dropout rate, enhancing equity, and improving learning outcomes. https://www.globalpartnership.org... Less than 10 percent of schools are connected to the Internet across many developing countries.

Tracer study on 3,000 TVET graduates from 2007-2012 carried out by the World Bank in 2013 reported that most of the graduates work in the public sector. 30% of graduates, who were working secured a job before graduation. 45% of those who were working studied Business Administration. It shows that the profile of graduates from TVET does not correspond with the needs of the economy (VERLA, EMCS).

In Laos, 22% of the labor force (15-64 years old) has upper secondary and tertiary level of education, the education level of the remaining part is below secondary. According to data from 2011, in comparison to other ASEAN (+6) countries, Laos had the lowest enrolment rate in upper secondary TVET with 1, 1% (China with 42, 6% had the highest rate, followed by Thailand at 39, 9%). On the other hand, Laos contributed the highest share of tertiary enrolment with 61 % followed by China (45%) and Malaysia (43%).

With reference to the Technical and Vocational Education and Training Development Plan 2016-2020 on “Education Law of the Lao PDR ref No. 04/NA dated July 3rd 2007 and the “Technical and Vocational Education and Training (TVET) Law, ref No. 42/NA dated December 23rd 2013.” The TVET sector plays an important part in the training of skilled workers for the industry and in meeting labor market needs. There have been no recent nationwide study on labor needs. In the most recent was made by ADB in 2009-2010, among 819 companies in 8 provinces in the study, the plan indicates a need on the need to improve the skills in the areas of” Agriculture, Tourism and hospitality, Construction and infrastructure and Information Technology.

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| --- | --- | --- | --- |
| NVQF | Qualification | Entry requirements | Duration of training |
| Level 1 | Certificate I | Primary education or equivalent and higher | 3-6 months |
| Level 2 | Certificate II | Primary education or equivalent and higher | After Certificate I: 6 months |
|  |  |  | 1 year |
| Level 3 | Certificate III |  | After Certificate II: 1 year |

## Project Title

Second Strengthening Technical Vocational Education & Training (SSTVET) in LAO PDR

## 

## Project Donor & Number

ADB Grant No. 0503-LAO (SF)

# Purpose of this competency standard

The Purpose of the Competency Standard for the COMPUTER OPERATIONLevel I is to provide a framework for Competency Based Training (CBT) Program resulting in Competent COMPUTER OPERATION under the INFORMATION COMMUNICATIONS TECHNOLOGY Sector of PDR Lao.

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# Competency Standard/ Qualification/ Job Description

This Competency, Standards/ Qualification of COMPUTER OPERATION (OPERATOR) for Certificate Level I, defined in the Manual for Developing Competency Based Standards Version March 2013.

This Qualification is packaged from the competency map of Computer Operation as shown in section F of this document. This is designed to reflect the job roles of Computer Operation and employees performing data entry tasks for professionals and organizations in a range of workplace settings specifically applicable to Lao PDR.

This Competency Standard sits at NVQF Level 1 in Lao PDR, and is developed in line with CBT approach.

## Job description

This qualification covers the skills and knowledge in Basic, Common & Core Competencies required by the Certificate Level I Qualification consists of competencies that an individual must achieve to enable her/him to COMPUTER OPERATION (Code: 4132.10) Record the data on a computer, card or magnetic tape by the type of storage device; Processing and sending information to units; Check the validity of the recorded data. Save data, numbers and more with a computer.

Person deemed competent in this qualification:

* has theoretical knowledge in computer system
* Has a range of well-developed skills on basic usage of word processing, spreadsheets, and PRESENTATION software and online applications and services.
* Working on jobs requiring minimal supervision and good communication skills.
* be responsible for the entrusted work on data encoding and other related tasks
* solve minor work problems using basic methods, software, computer hardware, tools, materials and information

**Job roles/employment outcomes**

The Certificate **Level 1** in COMPUTER OPERATION (OPERATOR) is intended to prepare new employees or recognize and develop existing workers who are performing data entry and organization or office works and IT/ICT industry/sector.

Employment outcomes targeted by this qualification is COMPUTER OPERATION (OPERATOR)

**Application**

The qualification is in line with CBT principles and is suitable for a Lao PDR Apprenticeship pathway.

Where common/core units of competency are packaged to suit a particular industry sector or occupational outcome, Registered Training Organizations (RTOs) might issue, for example, a:

Certificate me in INFORMATION COMMUNICATIONS TECHNOLOGY - COMPUTER OPERATION (OPERATOR).

It should be noted that a qualification with a specialization does not change the title of the qualification.

**CAREER PATH INFORMATION**

Career path into the qualification

This qualification may be accessed by direct entry. From Secondary Schools (level 9 or 12) or anybody with partial Secondary Education that meets the entry requirements.

Career path from the qualification

Further training pathways from this qualification include Certificate II within the IT/ICT TRADE training package qualifications.

# Outline of this Competency Standard

This Competency Standard contains ***Units of Competency*** as detailed within. These **Units** form the basis for CBT Learning Programmes for IT/ICT Trade. Each **Unit** contains the required **Elements of Competency**. Each **Unit** being able to stand alone when applied in a work situation.

Each **Unit** can be amended in content or structure to meet the evolving needs of the COMPUTER OPERATORS. Changes and amendments to this Competency Standard will be made in line with the existing Quality Assurance Procedures as approved by the appropriate authority.

This Competency Standard is structured in line with the approved Manual for Developing Competency Standards, developed as a part of the STVET programme. For Quality Assurance purposes, each Unit is coded in line with the example below:

**Code Example**

With reference to the International Labor Organization website (<http://www.ilo.org/public/english/bureau/stat/isco/>), The International Standard Classification of Occupations (ISCO) is one of the main international classifications for which ILO is responsible. It belongs to the international family of economic and social classifications. In addition, ISCO is a tool for organizing jobs into a clearly defined set of groups according to the tasks and duties undertaken in the job. Its main aims are to provide: “a basis for the international reporting, comparison and exchange of statistical and administrative data about occupations; a model for the development of national and regional classifications of occupations; and a system that can be used directly in countries that have not developed their own national classifications.” PDR Lao together with many countries, have used one or more versions of ISCO as the model for their own national classifications.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| *Occupation* | *Job* | *Major* | *Sub-major groups* | *Minor* | *Unit Type* | *Unit No.* | *Version No* |
| IT/ICT | Computer Operation (Operator) | Clerical Support Workers | General Keyboard Clerks |  |  |  |  |
|  | 4 | 41 | 1 | 1 | 001 | 01 |
| Computer Operation (Operator) | Technicians and associate professionals | Business and administration associate professionals | 1 |  |  |  |
|  | 3 | 33 | 1 | 1 | 001 | 01 |

**Selected Lao Standard Code Occupation (Ministry of Labor and Social Welfare) 2016 inclusion under the IT/ICT Trade Sector**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Major Group** | | | | | |  |  |
| **4** | **Clerical Support Workers (\*ISCO)** | | | | |  |  |
|  |  | | | | |  |  |
|  |  | Sub-major |  | | | | |
|  |  | 41xx.xx | General and keyboard clerks | | | | |
|  |  |  |  | 410x.xx | General office clerks | | |
|  |  |  |  | 411x.xx | General office clerks | | |
|  |  |  |  |  |  | 4110.10 | Clerk, general affair/administrative |
|  |  |  |  |  |  | 4110.90 | Other general Office Clerks |
|  |  |  |  | \*412 | Secretaries (General) \* proposed to be included (from ILO-ISCO) | | |
|  |  |  |  |  |  | 4120.90 | Other secretaries (general) |
|  |  |  |  | 4131.xx | Typists and word processing operators | | |
|  |  |  |  |  |  | 4131.10 | Typist |
|  |  |  |  |  |  | 4131.30 | Word processing operators |
|  |  |  |  |  |  | 4131.90 | Other typists and word processing operators |
|  |  |  |  | 4132.xx | Data entry clerks | | |
|  |  |  |  |  |  | 4132.10 | Clerk, computer-data entry |
|  |  |  |  |  |  | 4132.20 | Clerk, accounting machine |
|  |  |  |  |  |  | 4132.90 | Other data entry clerks |
|  |  |  |  |  |  |  |  |
| **3** | **Technical And Associate professionals** | | | | | | |
|  |  | 33xx.xx. | Business and administration associate professionals | | | | |
|  |  |  |  | 3341.1 | Clerk, word processing | | |
|  |  |  |  | 3341.20 | Clerk, word processing | | |
|  |  |  |  | 3341.1 | Clerk, word processing | | |
|  |  |  |  | 3341.1 | Clerk, word processing | | |
|  |  |  |  | 3341.1 | Clerk, word processing | | |

A person who has achieved this Qualification is competent to be:

* PC/Computer operators/workers
* Office Clerks and Assistants
* Data-entry Encoders and Typists
* General and Keyboard Clerks
* Officer Clerks and Assistants
* Technical Support and Associate Professionals

|  |  |  |
| --- | --- | --- |
| *Unit No.* | *CODE NO.* | *BASIC COMPETENCIES* |
| 1 | SSTVET-ICT101 | Perform computations using basic mathematical concepts |
| 2 | SSTVET-ICT102 | Apply English Communication in the Workplace |
| 3 | SSTVET-ICT103 | Work in a team environment |
|  | *CODE NO.* | *COMMON COMPETENCIES* |
| 4 | SSTVET-ICT104 | Apply quality work standards |
| 5 | SSTVET-ICT105 | Adapt entrepreneurial knowledge and Skills |
| 6 | SSTVET-ICT106 | Observe Occupational Health, Environmental and Safety (OHS) Practices |
| 7 | SSTVET-ICT107 | Observe career and professional ethics in the Workplace |
|  | *CODE NO.* | *CORE COMPETENCIES* |
| 8 | SSTVET-ICT108 | Operate a computer system |
| 9 | SSTVET-ICT109 | Perform Keyboarding and basic word processing |
| 10 | SSTVET-ICT110 | Use a spreadsheet application |
| 11 | SSTVET-ICT111 | Operate a presentation application |
| 12 | SSTVET-ICT112 | Use online applications |

# BASIC UNITS OF COMPETENCY

###### PERFORM COMPUTATIONS USING BASIC MATHEMATICAL CONCEPTS

|  |  |  |
| --- | --- | --- |
| **UNIT CODE:** |  | SSTVET-ICT101 |
|  | **UNIT DESCRIPTOR:**  This unit of competency requires the knowledge, skills and attitude of a worker to perform computations using basic mathematical concepts in the workplace. It specifically includes the tasks of identifying calculation requirements in the workplace, selecting appropriate mathematical method/concept for the calculation and using appropriate instruments tools to carry out calculation and in solving problem | |

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| --- | --- | --- |
| Elements & Performance Criteria | | |
| **ELEMENTS** | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Use calculation requirements, factual data and figures in solving problems. | * 1. The calculation requirements are identified from workplace information |
| 1. Select appropriate methods to apply numeric reasoning and judgment based on factual data or information. | * 1. Appropriate method/concept is selected to carry out the calculation requirements |
| 1. Use documented procedures or rules, and tools | * 1. The calculations are completed using appropriate procedures, tools and instruments |
| **Range of Variables** | | |
| **VARIABLES** | **RANGE** |
| 1. Written notices and instructions | * 1. Handwritten and printed material   2. Area   3. Height   4. Length/Breath/thickness   5. Diameter   6. Weight   7. Capacity   8. Time   9. Temperature   10. Material usage   11. Speed   12. Costing   13. Mass   14. Density   15. Statistical formulas (summation, mean, median, mode)   16. Population and sample   17. Conversion |
| 1. Organizational Guidelines | It may include:   * 1. Information documentation procedures   2. Administrative manuals   3. Memorandum   4. Verbal Instructions   5. Job order   6. Invoice and Receipts   7. Design and drawings   8. Layout   9. Graphs   10. Charts   11. Articles or Write-ups |
| Evidence Guide | | |
| **ASPECTS OF COMPETENCY** | **EVIDENCE REQUIREMENTS** |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   * 1. Identified calculation requirements from workplace information   2. Selected appropriate method to carry out the calculation requirements   3. Completed calculations using appropriate tools/instruments |
| 1. Underpinning knowledge and attitudes | * 1. Numerical concept   2. Basic mathematical methods such as addition, subtraction, multiplication and division and percentage.   3. Mathematical language, symbols and terminology   4. Measuring units   5. Basic Statistical formulas and processes   6. Knowledge of computer applications   7. Commitment to occupational safety and health   8. Communication with peers, sub-ordinates and seniors in workplace.   9. Promptness in carrying out activities.   10. Tidiness and timeliness.   11. Respect to peers, sub-ordinates and seniors in workplace   12. Environmental concern.   13. Sincerity and honesty |
| 1. Underpinning skills | * 1. Adding number   2. Subtracting numbers   3. Multiplying numbers   4. Dividing numbers   5. Measuring of linear   6. Using of mathematical language, symbols, terminology and technology   7. Measuring of different physical parameter.   8. Calculating geometrical parameters: angle, parallelism, perpendicularity, area and volume   9. Statistical computation and application |
| 1. Resource implications | The following resources should be provided:   * 1. Lecture Room   2. Laboratory Room   3. Software: Office applications and statistical software and tools |
| 1. Method of Assessment | Competency in this Unit should be assessed through:   * 1. Direct Observation   2. Oral interview   3. Written Evaluation   4. Third Party Report |
| 1. Context for Assessment | Competency may be assessed on the job or simulated environment:   * 1. Assessment shall be observed while tasks are being undertaken whether individually or in group   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

###### APPLY ENGLISH COMMUNICATION IN THE WORKPLACE

|  |  |
| --- | --- |
| **UNIT CODE:** | SSTVET-ICT102 |
| **UNIT DESCRIPTOR:**  This unit of competency requires the knowledge, skills and attitude of a worker to apply English communication in the workplace. It specifically includes the tasks of reading and understanding workplace documents in English, writing simple workplace written communications in English, listening and comprehending to English conversations and performing conversations in English language. | |

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| Elements & Performance Criteria | |
| **ELEMENTS** | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Actively converse and present ideas in interviews, meetings and official activities English and Lao | * 1. The conversation is carried out in English with peers, customers, stakeholders and the management to the required workplace standard |
| 1. Writes and produce formal business correspondence of documents in both Lao and in English | * 1. Simple routine workplace documents are prepared using key words, correct grammar, formats, phrases, simple sentences, reports and visual aids where appropriate   2. Key information is written in the appropriately in standard formats |
| 1. Create creative and formal written reports | * 1. Workplace documents are read and understood   2. Visual information is conveyed interpreted |
| **Range of Variables** | |
| **VARIABLES** | **RANGE** |
| 1. Routine Workplace | May include but not limited to, writing:  1.1 Agenda  1.2 Letter  1.3 Resume  And, conversing:  1.4 Interview  1.5 Verbal Communication to peers and superiors |
| 1. Visual information | It may include:   * 1. Forms and templates   2. Graphs   3. Charts |
| 1. Appropriate Methods, Procedures | * 1. Writing and typing business letters   2. Spell Checking   3. Use of proper grammar and punctuations |
| 1. Tools and Instruments | * 1. Computer   2. Application software: Word processing |
| Evidence Guide | |
| **ASPECTS OF COMPETENCY** | **EVIDENCE REQUIREMENTS** |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   * 1. Converse in English with peers and customers.   2. Create reports of workplace documents in English |
| 1. Underpinning knowledge and attitudes | * 1. Ability to read and understand workplace documents in English by using appropriate vocabulary and grammar, standard spelling and punctuation   2. Ability to write simple routine workplace documents in English such as: Schedules and agenda, job sheets, operational manuals, brochures and promotional material   3. Ability in active listening in English language is demonstrated to the required workplace standard   4. Ability to perform conversation in English with peers, customers and management to the required workplace standard   5. Listening and questioning skills   6. Ability to follow simple directions   7. Commitment to occupational safety and health |
| 1. Underpinning skills | * 1. Adding number   2. Subtracting numbers   3. Multiplying numbers   4. Dividing numbers   5. Measuring of linear   6. Using of mathematical language, symbols, terminology and technology   7. Measuring of different physical parameter.   8. Calculating geometrical parameters: angle, parallelism, perpendicularity, area and volume   9. Statistical computation and application |
| 1. Resource implications | The following resources should be provided:   * 1. Lecture Room   2. Videos   3. Audio- Visual Tools |
| 1. Method of Assessment | Competency in this Unit should be assessed through:   * 1. Written test   2. Oral questions   3. Rubrics for written and oral Assessments |
| 1. Context for Assessment | Competency may be assessed on the job or simulated environment:   * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

###### WORK IN TEAM ENVIRONMENT

|  |  |
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| **UNIT CODE:** | SSTVET-ICT103 |
| **UNIT DESCRIPTOR:**  This unit of competency requires the knowledge, skills and attitude of a worker to identify role and responsibility as a member of a team. | |

|  |  |
| --- | --- |
| Elements & Performance Criteria | |
| **ELEMENTS** | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Describe the team’s role and scope | * 1. The ***role and team’s objective*** is identified from available *workplace policies and goal list.*   2. The team’s scope or parameters, business roles and responsibilities are identified. |
| 1. Identify personal role and responsibility within team | * 1. Simple routine workplace documents are prepared using key words, correct grammar, formats, phrases, simple sentences, reports and visual aids where appropriate   2. Key information is written in the appropriately in standard formats. |
| 1. Work as a team member | * 1. Workplace documents are read and understood   2. Visual information is conveyed interpreted |
| **Range of Variables** | |
| **VARIABLES** | **RANGE** |
| 1. Role and Objective of Team | May include but not limited to, writing:   * 1. Work activities in a team environment with enterprise or specific sector.   2. Limited discretion, initiative and judgement maybe demonstrated on the job, either individually or in a team environment. |
| 1. Sources of Information | May include, but not limited to:   * 1. Standard operating and/or other workplace procedures   2. Job procedures   3. Machine/equipment manufacturer’s specifications and instructions   4. Organizational or external personnel   5. Client/supplier instructions   6. Quality standards   7. OHS and environmental standards |
| 1. Workplace Context | May include but not limited to:   * 1. Work procedures and practices   2. Conditions of work environments   3. Legislation and industrial agreements   4. Standard work practice including the storage, safe handling and disposal of chemicals   5. Safety, environmental, housekeeping and quality guidelines |
| Evidence Guide | |
| **ASPECTS OF COMPETENCY** | **EVIDENCE REQUIREMENTS** |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   * 1. Operated in a team to complete workplace activity   2. Worked effectively with others   3. Conveyed information in written or oral form   4. Selected and used appropriate workplace language   5. Followed designated work plan for the job   6. Reported outcomes |
| 1. Underpinning knowledge and attitudes | * 1. Communication process   2. Team structure   3. Team roles   4. Group planning and decision making |
| 1. Underpinning skills | * 1. Communicate appropriately, consistent with the culture of the workplace |
| 1. Resource implications | The following resources should be provided:   * 1. Access to relevant workplace or appropriately simulated environment where Assessment can take place   2. Materials relevant to the proposed activity or tasks |
| 1. Method of Assessment | Competency in this Unit should be assessed through:   * 1. Observation of the individual member in relation to the work activities of the group   2. Observation of simulation and or role play involving the participation of individual member to the attainment of organizational goal   3. Case studies and scenarios as a basis for discussion of issues and strategies in teamwork |
| 1. Context for Assessment | Competency may be assessed on the job or simulated environment:   * 1. Competency may be assessed in workplace or in a simulated workplace setting   2. Assessment shall be observed while task are being undertaken whether individually or in group.   3. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines |

# COMMON UNITS OF COMPETENCY

###### APPLY QUALITY STANDARDS

|  |  |
| --- | --- |
| **UNIT CODE:** | SSTVET-ICT104 |
| **UNIT DESCRIPTOR:**  This unit of competency requires the knowledge, skills and attitude of a worker needed to apply quality standards in the workplace. The unit also includes the application of relevant safety procedures and regulations, organization procedures and customer requirements. | |

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| Elements & Performance Criteria | |
| **ELEMENTS** | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Assess quality of received materials | * 1. The work instruction is obtained and the work is performed in congruence with standard operating procedures.   2. Received documents or data or materials are checked against the standard workplace specifications and criteria.   3. Underspecified or un-organized materials related to work are identified and isolated, are recorded and in accordance with workplace procedures.   4. Underspecified or un-organized materials are replaced in accordance with workplace procedures. |
| 1. Assess own work | * 1. Documentation relative to quality within the company is identified and used.   2. Completed work is checked against workplace standards relevant to the task undertaken.   3. Errors are identified and isolated.   4. Information on the quality and other indicators of production performance are recorded in accordance with workplace procedures.   5. In cases of deviations from specific quality standards, causes are documented and reported in accordance with the workplace’ s standards operating procedures. |
| 1. Engage in quality improvement | * 1. Process improvement procedures are participated in relative to workplace assignment.   2. Work is carried out in accordance with process improvement procedures.   3. Performance of operation or quality of product of service to ensure customer satisfaction is monitored. |
| **Range of Variables** | |
| **VARIABLES** | **RANGE** |
| 1. Routine Workplace | May include but not limited to:   * 1. Manuals   2. Job orders, or   3. Employee Data, or   4. Payroll Data, or   5. Records of Time Logs, or   6. Expenses and Receipts, or   7. Instructional videos |
| 1. Visual information | It may include:   * 1. Materials not conforming to specification   2. Materials that contain incorrect/outdated information   3. Hardware error or defects   4. Materials that do not conform with any regulatory agencies |
| 1. Appropriate Methods, Procedures | * 1. Organization work procedures   2. Manufacturer’s instruction manual   3. Customer requirements   4. Forms |
| 1. Tools and Instruments | * 1. Computer   2. Application software: Word processing |
| Evidence Guide | |
| **ASPECTS OF COMPETENCY** | **EVIDENCE REQUIREMENTS** |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   * 1. Carried out work in accordance with the company’s standard operating procedures   2. Performed task according to specifications   3. Reported defects detected in accordance with standard operating procedures   4. Carried out work in accordance with the process improvement procedures |
| 1. Underpinning knowledge and attitudes | * 1. Quality standards may be related but not limited to the following:      1. Materials      2. Hardware      3. Final product      4. Production processes      5. Customer service   2. Customer:      1. Co-worker      2. Supplier/Vendor      3. Client      4. Organization receiving the product or service   3. Errors may be related but not limited to the following:      1. Deviation from the requirements of the Client      2. Deviation from the requirement of the organization   4. Relevant production processes, materials and products   5. Characteristics of materials, software and hardware used in production processes   6. Quality checking procedures   7. Workplace procedures   8. Safety and environmental aspects of production processes   9. Fault identification and reporting   10. Quality improvement processes |
| 1. Underpinning skills | * 1. Reading skills required to interpret work instruction   2. Communication skills needed to interpret and apply defined work procedures   3. Carry out work in accordance with OHS policies and procedures   4. Critical thinking   5. Solution providing and decision-making |
| 1. Resource implications | The following resources should be provided:   * 1. Lecture Room   2. Materials, software and hardware to be used in a real or simulated situation |
| 1. Method of Assessment | Competency in this Unit should be assessed through:   * 1. Written test   2. Observation and oral questioning   3. Third party report   4. Portfolio   5. Practical demonstration |
| 1. Context for Assessment | Competency may be assessed on the job or simulated environment:   * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

***UNIT 5 ADAPT ENTREPRENUERAL KNOWLEDGE AND SKILLS***

|  |  |  |
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| **UNIT CODE:** | SSTVET-ICT105 | |
| **UNIT DESCRIPTOR:**  This unit covers knowledge, skills and attitudes required of a worker to observe in the conduct of basic market research and statistics on demand and supply, software tools for personal, accounting and small- business and marketing content materials. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italized items are elaborated in the range of variables)* |
| * 1. Understanding economics and entrepreneurial concepts | | Successful entrepreneurs’ skills are identified:   * + 1. Resiliency     2. Focus     3. Long-term Investing     4. People Management     5. Innate/Personal Traits        1. Salesmanship        2. Self-reflection        3. Self-reliance     6. Other traits   The law on demand and supply and basic economics concepts are understood:   * + 1. Law on Supply     2. Law on Demand     3. Supply and Demand Relationship     4. Equilibrium and Disequilibrium     5. Shift and Movement     6. Economics and Markets, Marketing tools   A comprehensive personal or group entrepreneurial skills in comparison with successful entrepreneurs’ skills is presented in tabular and textual form.  Communication skills in written and oral form are applied. |
| Apply and use tools or applications for personal and small-business budgeting, accounting | | * 1. Explored on various productivity, accounting and business software   2. Identify the latest software, hardware and application systems for business.   3. Create a personal, family and small-business budget plans and forecast   4. Software for budget preparations, simple budget analysis, sales and sales forecasting are used. |
| 1. Identify the requirements and processes in setting-up a small business. | | 3.1 Various types of business are explored on:   * + 1. Home Business     2. Services     3. Product Sales     4. Online Business   1. Basic marketing strategies for business that would best-fit a business case is presented in a report format.   2. A market research is prepared. |
| 1. Conduct basic market research and statistics on con demand and supply | | * 1. Conduct a case analysis adapting learned concepts.   2. Adept on the parts and process of creating small business plan and its requirements   3. Adopt simple successful business strategies used by leading entrepreneurs   4. Use software and statistical tools for the business case/project |

**RANGE OF VARIABLES**

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| 1. Business Processes | * 1. Law on demand and supply   2. Economic concepts   3. Laws on setting-up a small-business   4. Local requirements   5. Markets and Marketing concepts |
| 1. Budget and forecasting | * 1. Software applications and systems for forecast   2. Statistical and Mathematica tools. |
| 1. Market research | * 1. Primary data or information   2. Secondary data or information   3. Guidelines on using data gathering tool |
| 1. Communication skills | * 1. Writing business letters   2. Presenting one-self to a person or group   3. Values and characteristics of business professional |

**EVIDENCE GUIDE**

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| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   * 1. Followed OHS policies and procedures   2. Used software tools for business-related activities and analysis   3. Communicate effectively.   4. Perseverance and professional ethics. |
| 1. Underpinning knowledge and attitude | * 1. Clear understanding of business and marketing concepts as:      1. Law on Supply      2. Law on Demand      3. Supply and Demand Relationship      4. Equilibrium and Disequilibrium      5. Shift and Movement      6. Economics and Markets, Marketing |
| 1. Underpinning skills | * 1. Ability to read and understand ohms workplace documents in English   2. Work effectively with others   3. Ability to follow simple directions, charts, and procedures |
| 1. Resource implications | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Work place procedure   4. Materials relevant to the proposed activity   5. All tools, equipment, material and documentation required   6. Relevant specifications or work instructions |
| 1. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Oral questions   3. Computer laboratory work   4. Demonstration   5. Rubrics for laboratory work or outputs |
| 1. Context of Assessment | * 1. Competency should be assessed in an actual workshop or simulated environment. |

UNIT 6 OBSERVE OCCUPATIONAL HEALTH, ENVIRONMENTAL AND SAFETY (OHS) PRACTICES IN THE WORKPLACE

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| **UNIT CODE:** | SSTVET-ICT106 | |
| **UNIT DESCRIPTOR:**  This unit covers knowledge, skills and attitudes required of a worker to observe occupational health and safety (OH&S) practices in the workplace. It specifically includes the tasks of identifying health concepts, OH&S policies and procedures, applying personal health and safety practices, reporting hazards and risks and responding to emergencies. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italized items are elaborated in the range of variables)* |
| 1. Apply knowledge of personal and workplace health and safety requirements | | OHS policies and procedures are followed:  1.1 Personal Protective Equipment (PPE) is selected and used  1.2 Personal hygiene is maintained.  1.3 The basic human biological and physiological ecological and environmental processes are understood.  1.4 Health and wellness concepts are understood. |
| 1. Apply OHS policies and procedures | | * 1. OHS policies and safe operating procedures are read and understood.   2. Safety signs and symbols are identified and followed   3. Emergency response, evacuation procedures and other contingency measures are determined. |
| 1. Apply proper food preparations, handling and storage | | * 1. Understand use of personal protective tools, food safety and basic nutrients   2. Understand and apply food preparations, handling, storage and other alternatives |
| 1. Apply hazardous waste management concepts and identify technological impact on the environment | | * 1. OHS policies and safe operating procedures are read and understood.   2. Safety signs and symbols are identified and followed   3. Hazards and risks are identified, assessed and controlled. |
| 1. Report hazards, risks, and respond emergencies | | * 1. Incidents arising from hazards and risks are reported to authority   2. Corrective actions are implemented to correct unsafe conditions in the workplace   3. Alarms and warning devices are responded on   4. Emergency response plans and procedures are implemented   5. First aid procedure is applied during emergency situations |

**RANGE OF VARIABLES**

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| 1. OHS policies | * 1. PDR Lao standards for OHS   2. International OHS requirements   3. Lao Building Code   4. Fire Safety Rules and Regulations   5. Light Engineering Industry Guidelines |
| 1. Personal Protective Equipment (PPE) | * 1. Apron   2. Chemical/Gas masks   3. Ear plugs   4. Face mask   5. Gas Mask   6. Gloves   7. Goggles and safety glasses   8. Safety shoes |
| 1. Hazards and risks | * 1. Biological hazards   2. Chemical hazards   3. Electrical hazards   4. Physical Hazards such as:      1. Machine hazards      2. Materials hazards      3. Tools and Equipment hazards |
| 1. Emergency response plans and procedures | * 1. Medical and first aid materials   2. Firefighting procedures   3. Earthquake response procedures   4. Evacuation procedures   5. Evacuation chart/maps |

**EVIDENCE GUIDE**

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| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   * 1. Followed OHS policies and procedures   2. Selected and used personal protective equipment (PPE)   3. Reported incidents arising from hazards and risks to authority   4. Emergency response plans and procedures are implemented   5. Applied basic first aid procedure   6. Shown understanding on basic human biological and physiological ecological and environmental processes are understood. |
| 1. Underpinning knowledge and attitude | * 1. Ability to read and understand workplace documents in English by using appropriate vocabulary and grammar, standard spelling and punctuation   2. Ability to understand the codes, hazard types, policies and procedures   3. Identifying the OHS policies and procedures   4. Following personal work safety practices   5. Identifying and reporting hazards and risks   6. Able to respond to emergency procedures   7. Maintaining physical well-being in the workplace   8. Performing basic firefighting and using fire extinguishers   9. Applying basic first aid procedures and Performing first-aids   10. Commitment to occupational safety and health   11. Communication with peers, sub-ordinates and seniors in workplace on OHS   12. Promptness in carrying out activities   13. Tidiness and timeliness   14. Respect of peers, sub-ordinates and seniors in workplace. |
| 1. Underpinning skills | * 1. Ability to read and understand OHS workplace documents in English   2. Work effectively with others   3. Ability to follow simple directions, charts, and procedures |
| 1. Resource implications | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Work place procedure   4. Materials relevant to the proposed activity   5. All tools, equipment, material and documentation required   6. Relevant specifications or work instructions |
| 1. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Oral questions   3. Computer laboratory work   4. Demonstration   5. Rubrics for laboratory work or outputs |
| 1. Context of Assessment | * 1. Competency should be assessed in an actual workshop or simulated environment. |

***UNIT 7 PROFESSIONAL AND ETHICAL WORK VALUE***

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| **UNIT CODE:** | SSTVET-ICT107 | |
| **UNIT DESCRIPTOR:**  This unit of competency requires the knowledge, skills and attitude of a worker to perform computations using basic ethical and professional values at work. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables)* |
| 1. Check employment rights and responsibilities, taxes, and sources of information and assistance. | | * 1. Explain the value of work and ethics   2. Identify company standards, and rules   3. Uphold integrity and proper work attitudes |
| 1. Show strong organizational and customer service skills | | * 1. Know the stakeholders   2. Show customer service skills and values |
| 1. Apply workmanship and good client relations to various disciplines in the organization. | | * 1. Show good client relations in communication(oral, written)   2. Proper dealing with others |
| 1. Working in team environment and ability to work with people, timeliness, and assertiveness in a range of specified situations | | * 1. Show proper gestures   2. Show value of the company’s mission, vision, and goals   3. Achieve company goals and its success |

**RANGE OF VARIABLES**

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| * 1. Work Attitudes | May include but not limited to:   * 1. Quality of work   2. Cost consciousness   3. Efficiency   4. Effectiveness   5. Productivity   6. Punctuality   7. Resourcefulness   8. Innovativeness/Creativity   9. 5S |
| 1. Workplace information and situations | * 1. Administrative manuals   2. Layout   3. Violations   4. Acts |
| 1. Appropriate Methods, Procedures | * 1. Addition   2. Subtraction   3. Division   4. Multiplication   5. Conversion   6. Percentage and Ration   7. Simple mathematical equation   8. Statistical formulas   9. Sampling procedures   10. Probability   11. Conversion |
| 1. Tools and Instruments | * 1. Computer   2. Calculator   3. Tables   4. Online Converters |

**EVIDENCE GUIDE**

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| * 1. Critical aspects of competency | Assessment requires evidence that the candidate:   * 1. Work values and ethics   2. Company performance and ethical standards   3. Company policies and guidelines   4. Emergency response procedures   5. Fundamental rights at work including gender sensitivity   6. Work responsibilities/job functions   7. Corporate social responsibilities   8. Company code of conduct/values   9. Balancing work and family responsibilities   10. Decision making and conflict resolution strategies procedures   11. Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation |
| * 1. Underpinning knowledge and attitude | * 1. Carrying out work practices in compliance with industry work ethical standards, organizational policy and guidelines   2. Applying personal behavior and relationships with co-worker in accordance with the workplace policy and guidelines   3. Reporting work incidents/situations in accordance with company protocol/guidelines   4. Demonstrating Personal work practices and values consistently with acceptable ethical conduct and company’s core values |
| * 1. Underpinning Skills | * 1. Applying good manners and right conduct   2. Observation skills   3. Negotiation skills   4. Show environmental concern   5. Communication skills (verbal and listening)   6. Interpersonal skills to develop rapport with other parties   7. Skill of self-awareness, understanding and acceptance |
| * 1. Resource implications | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Computers   4. Internet |
| 5. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Oral questions   3. Reports |
| 6. Context of Assessment | * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

*Note: After satisfactorily completing the required components for the 1st Unit of Competency, the succeeding Unit of Competency will then be worked upon).*

**G. CORE COMPETENCIES**

UNIT 8: OPERATE the computer system

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| **UNIT CODE:** | SSTVET-ICT108 | |
| **UNIT DESCRIPTOR:**  This Unit aims to provide knowledge and skills on using a computer system: starting the computer system, working with files and folders, programs that are installed, the I, P, O, S, C (input, process, output, storage and communications) functions of the computer system. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Start the computer system. | | 1. Work is undertaken safely in accordance with the workplace and standard procedures. 2. The computer hardware and its components are checked and turned-on or turned-off properly. 3. The availability of the operating system and application software are checked in the computer system. 4. A pre-set-up wired or wireless printer is identified. 5. The computer system’ hardware and software applications are checked. |
| 1. Customize Windows and desktop settings | | * 1. The Control Panel and its properties are navigated.   2. The application software are installed or added, updated or removed from the computer system.   3. Desktop icons are arranged, move, copied or removed.   4. The icons of the application programs are added, removed, selected in the desktop and the Taskbar   5. Desktop settings are saved. |
| 1. Work with files and folders | | * 1. A file is saved in a folder after using a software application program or software   2. Folders are created, renamed and/or deleted.   3. File and file details are searched.   4. Disks and other storage devices are used and checked.   5. Back-up data and files. |
| 1. Print file | | * 1. A printer is added or installed with the correct printer settings   2. A default printer is assigned.   3. A test page is printed.   4. Print jobs are viewed in the printer task screen.   5. Print jobs are deleted as needed. |
| 1. Shutdown the computer system. | | * 1. All application programs are viewed in the task manager window.   2. All application programs used were closed or exited.   3. The computer system and its peripherals are shutdown properly. |

**RANGE OF VARIABLES**

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| * 1. Routine Workplace | May include but not limited to:   * 1. Computer System: desktop, laptop   2. Peripheral devices: mouse, keyboard, monitor, printer and scanner   1.3 User’s Manual or guidelines  1.4 Standard OHS information |
| * 1. Visual Information | * 1. Forms with tables   2. Labels for computer/PC/Workstation and devices   3. User’s Manual Diagrams   4. Forms and templates |
| 1. Appropriate Methods and Procedures | * 1. Sorting   2. File searching and indexing   3. Set order   4. Quality standards   5. OHS standards |
| 1. Tools and Instruments | * 1. Computer System: desktop, laptop   2. Peripheral devices: mouse, keyboard, monitor, printer and scanner |

**EVIDENCE GUIDE**

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| 1. Underpinning Knowledge | * 1. Able to identify the basic parts of the computer hardware: Input/output, processing, storage and communication functions and/or parts   2. Understand the BIOS or basic Input/output system: Start-up and shutdown   3. Identify the ports to connect the peripheral devices.   4. Distinguish the types and categories of the software and its characteristics. |
| 2. Underpinning Skills | * 1. Use the computer, navigate the operating system and software applications.   2. Save the files using appropriate file names and folders.   3. Apply numerical skills and quality standards   4. Diligence and quality standards are applied. |
| 3. Resources Implication | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Content/ topic Videos |
| 4. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Observation   3. Oral questions   4. Reports |
| 5. Context of Assessment | * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

UNIT 9 PERFORM KEYBOARDING AND BASIC WORD PROCESSING

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| UNIT CODE: | SSTVET-ICT109 | |
| UNIT DESCRIPTOR:  This Unit intends to provide knowledge and skills on preparation of word documents. It also deals with basic interface, tools/menu management, safety aspects, and word processing software and document management and handling techniques. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Perform Keyboarding | | * 1. The use of both hands and systematic keyboard / finger was applied.   2. A typing tutor or type-testing software was installed and used.   3. The profile of the user/student in the typing test software was created and saved.   4. Make sure when done typing in MS word the file should be saved in a known location to access when wanted. |
| 1. Format and insert objects in word documents. | | * 1. A new document was created and saved using meaningful file names and on a folder.   2. The toolbars and functionality of each tab, menu and icons are identified.   3. A picture, table, clipart, smart art, hyperlink or chart from the local storage device or online are inserted in a document that was saved on a given location of a word document   4. Proper formatting was applied: page orientation, page size, margins, font style; headers, footers and styles.   5. The spell check command was used. |
| 1. Apply file management. | | * 1. The files and folders have meaningful names.   2. Appropriate search methods and indexing was used.   3. Word files are easily searched, retrieved and modified.   4. Work ethics such: are authenticity, reliability, and integrity of records are applied.   5. Manage electronic record’s backup to meet functional requirement for computer. |
| 1. Create specific documents for specific purposes types of documents for several applications and uses. | | 5.1 Produced documents for the intended purpose:   * + 1. Personal: letters, poems, autobiography     2. Business: letter to a company, cover letter, resume   1. The mail merge function was applied to letters, envelops and other business documents.   2. Profile was updated with the addition of the compiled outputs. |

**RANGE OF VARIABLES**

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| 1. Routine Workplace | May include but not limited to:  1.1 Standard OHS information  1.2 Keyboarding profile  1.3 Profiling of outputs |
| 1. Visual information | * 1. Finger position   2. Documents   3. Forms and templates   4. Mail merged document   5. Videos |
| 1. Appropriate Methods, Procedures | * 1. Data Entry   2. File, folder management   3. Perform Scanning, Search Files / Folders   4. Printing   5. Saving   6. Printing   7. Archiving or back-ups   8. Quality standards   9. Portfolio Management |
| 1. Tools and Instruments | * 1. Computer   2. Peripherals   3. Installed Application Programs: user programs   + database programs   + word processors   + email programs   + Internet browsers   + system browsers   + spreadsheets   1. Online References   2. Internet connectivity |

EVIDENCE GUIDE

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| 1. Critical aspects of competency | * 1. Adapt a level accuracy and speed in keyboarding   2. The progress and level on keyboarding is saved in a student’s profile   3. Identify the different features and commands of the word processing software   4. Create, save, protect, edit, search, print, and apply formatting to Word documents   5. Hyperlink, insert object or graphics, headers and footers   6. Mail merge function and steps |
| 1. Underpinning Knowledge an attitude | * 1. Identify the parts and basic commands of the word processing software   2. Understand advanced commands in word-processing |
| 2. Underpinning Skills | * 1. Typing and saving documents   2. Apply file management and organization skills   3. Apply proper page formatting to documents   4. Back-up and manage documents or files |
| 3. Resources Implication | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Software: MS Office / MS Word   4. Videos   5. Desktop Computer (PC)   6. Peripherals   7. Internet connection for online access and backups |
| 4. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Oral questions   3. Computer laboratory work   4. Demonstration   5. Rubrics for laboratory work or outputs |
| 5. Context of Assessment | * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

EVIDENCE GUIDE

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| 1. Underpinning Knowledge | Able to know the concepts and commands on:   * 1. Data files, file types   2. Data Entry   3. File folder management   4. Method of file/folder Search, scanning   5. Word features: commands and toolbars   6. Printing methods |
| 2. Underpinning Skills | Perform tasks and command on:   * 1. Data Entry   2. Data and file creation   3. Adapt Printing methods   4. Organization skills |
| 3. Resources Implication | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Software   4. All tools, equipment, material and documentation required |
| 4. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Oral questions   3. Computer laboratory work   4. Rubrics for laboratory work or outputs |
| 5. Context of Assessment | * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

UNIT 10 USE SPREASHEET APPLICATION

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| UNIT CODE: | SSTVET-ICT110 | |
| UNIT DESCRIPTOR:  This basic Unit intends to provide knowledge and skills managing data in spreadsheets. It also deals with basic interface, tools/menu management, and spreadsheet application software handling techniques. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Enter data on cells, sheets and worksheets | | * 1. The MS Excel tabs, parts and toolbars are identified.   2. Data cells are named, the column and rows are resized, and merged.   3. Worksheets and workbooks are saved and printed.   4. Sheets are inserted and renamed. |
| 1. Adapt cell formatting and printing. | | * 1. Format Cell commands cells, colors, shades and lines are used for various purposes.   2. Apply the Conditional formatting commands for various purposes   3. Page layout: margins, size and columns and page break and views are applied. |
| 1. Use formulas and tables. | | * 1. The basic formulas and functions are used in calculating data and values in the table.   2. Date are Entered on tables.   3. Autofill is used on tables.   4. Data are sorted, and filtered. |
| 1. Insert graphs and use Excel’s advanced features. | | * 1. Charts are identified   2. Charts are inserted and labeled.   3. Chart are modified. |
| 1. Create personal and work-related documents | | * 1. Create Excel documents and files for various purposes:   5.4.1 Personal  5.4.2 School Forms  5.4.3 Simple Business data and documents |

**RANGE OF VARIABLES**

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| 1. Routine Workplace | May include but not limited to:  1.1 Standard OHS information  1.2 Profile update  1.3 Reports |
| 1. Visual information | * 1. Documents in spreadsheet/ Excel formats   2. Personal record: family background, contacts   3. School Forms: registration/enrollment sheets   4. Business data: sales data, income-expense data |
| 1. Appropriate Methods, Procedures | * 1. Editing   2. Saving   3. Sorting   4. Filtering   5. Formatting   6. Printing   7. Quality standards   8. Portfolio Management |
| 1. Tools and Instruments | * 1. Computer   2. Peripherals   3. Printer |

**EVIDENCE GUIDE**

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| * 1. Critical aspects of competency | Have gain full understanding and use of:   * 1. Basic mathematical formulas: Average, If, Sum, Count Max, Hyperlink, Date, VLOOKUP, LOOKUP, Transpose etc.   2. Types of charts/graphs and their use: pie chart, bar chart, giant chart, line graph, scattered chart, area chart   3. Steps in creating different charts/graphs, labeling and editing values/chart areas.   4. Filter, sort data in ascending or descending order, and use of skipping the lower values or date wise   5. Demonstrate the features of Format Cell available in the toolbar and the dialog box: purpose of formatting cells as width, height, Auto fit, delete, insert etc.   6. Procedures to format different cells in different ways like merger of cells and deletion of cells or conditional formatting etc.   7. Procedure to edit worksheet with different requirements like size of cells, colors, shades and lines etc. |
| * 1. Underpinning Knowledge and attitude | Have the knowledge on:   * 1. Basic mathematical formulas   2. Types of charts/graphs and their use   3. Sorting methods   4. Formatting features   5. Editing worksheets   6. Possess perseverance and consistency in work outputs |
| 1. Underpinning Skills | * 1. Create, print, save, edit, share documents   2. Use mouse and keyboard shortcuts   3. Organization skills |
| 1. Resource implications | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Software: MS Office-MS Excel and MS Access   4. Computers   5. Printer |
| 1. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Oral questions   3. Computer laboratory work   4. Demonstration   5. Rubrics for laboratory work or outputs |
| * 1. Context of Assessment | * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

UNIT 11 OPERATE A PRESENTATION APPLICATION

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| UNIT CODE: | SSTVET-ICT111 | |
| UNIT DESCRIPTOR:  This basic Unit intends to provide knowledge and skills on creating a presentation and using a presentation software. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Create presentation with design elements. | | * 1. Presentation and design rules are applied in accordance with the intended purpose and audience (simplicity, quality of graphics, transition/timing, visual appeal and theme, charts, color)   2. Prepare, Design and Deliver   3. The presentation software features, tabs and commands are identified.   4. Methods of slide creation, insertion, deletion and duplicate slide are applied. |
| 1. Apply themes and slide formats | | * 1. Themes, color schemes and designs are chosen.   2. Slide orientation and layout are applied on the master slide.   3. Change the design and color, fonts, effects and background.   4. Slides are formatted according the desired presentation. |
| 1. Create slideshow with animation | | * 1. Animation is added, played and timed: wipe down, wipe up, Wedge, Shape diamond, Wheel clockwise to one more slides.   2. Sound are applied to selected or to the whole presentation: sound effect (e.g. Camera, Bomb, arrow, applause, drum roll)   3. Timing elements are used. |
| 1. Format Slide | | * 1. Perform the procedure to format slide P2-Format the slide in different ways   2. Add/edit any new requirement to the same document. |
| 1. Publish presentations online | | * 1. Create and record your presentation   2. Upload your presentation to SkyDrive   3. Open up the presentation in the PowerPoint Web App   4. Copy the HTML text needed to publish the presentation   5. Paste in the HTML text on your web page   6. Publish And view presentation using presenters |

**RANGE OF VARIABLES**

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| 1. Routine Workplace | May include but not limited to:  1.1 Standard OHS information  1.2 Accomplishment Reports  1.3 Prepare the Master Slide  1.4 Insert and apply formatting to Slides  1.5 Design Slide  1.6 Apply animation and sound.  1.7 Demonstrate the basic techniques of animations like wipe down, wipe up, Wedge, Shape diamond, Wheel clockwise etc. this make the document fruitful while presentation and make it is easier to be understandable.  1.10. Demonstrate the basic techniques of animations like wipe down, wipe up, Wedge, Shape diamond, Wheel clockwise etc.  1.12. Demonstrate the features/attributes of animation pane available in the power Point software. |
| 1. Visual information | * 1. Documents MS Power Point formats   2. Forms and templates |
| 1. Appropriate Methods, Procedures | * 1. Saving   2. Printing   3. File Management   4. Reporting   5. Quality standards   6. Portfolio Management |
| 1. Tools and Instruments | * 1. Computer   2. Peripherals   3. Installers: Software   4. MS Excel   5. Online References |

**EVIDENCE GUIDE**

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| * 1. Critical aspects of competency | * 1. Understand different features and commands in MS Power Point software applications.   2. Manipulate presentation documents.   3. Explain how to open a new or saved file in MS Power Point print and use advanced features   4. Create, print, save, edit, share documents   5. Explain how to save file in MS Power Point |
| * 1. Underpinning Knowledge and Attitude | Has full understanding of:   * 1. MS Power Point features and commands   2. Create, print, save, edit, share documents   3. Design sets, animation, master slide setting and printing   4. Manage and backup presentation files   5. Perseverance and creativity attitudes |
| 3. Underpinning Skills | * 1. Communication Skills   2. Organizational Skills   3. Presentation skills in a group |
| 4. Resource implications | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Software: MS Office /MS Power Point   4. Work place procedure   5. Materials relevant to the proposed activity   6. All tools, equipment, material and documentation required   7. Relevant specifications or work instructions |
| 1. Methods of Assessment | Competency must be assessed through:   * 1. Written test   2. Oral questions   3. Computer laboratory work   4. Demonstration   5. Rubrics for laboratory work or outputs |
| * 1. Context of Assessment | * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

UNIT 12 use internet to share and send documents, AND MANAGE e-mail/internet

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| *UNIT CODE:* | *SSTVET-ICT112* | |
| UNIT DESCRIPTOR:  This basic Unit intends to provide knowledge and skills for managing email/internet. It also deals with basic interface, tools/menu management, safety aspects, and email/internet software handling techniques. This unit covers knowledge, skills and attitudes required of a worker to observe in use of software, web and online applications, creation of content art materials for the intended audience. | | |
| **ELEMENTS** | | **PERFORMANCE CRITERIA**  *(Italicized items are elaborated in the range of variables).* |
| 1. Usage of Internet and Web technologies | | * 1. The web and web technologies are identified.   2. The web processes and tools are identified.   3. Browsing and search methods and techniques are demonstrated.   4. Netiquette are identified and are followed.   5. Selected online applications are identified and used. |
| 1. Configure and manage e-mail account | | * 1. The web and web technologies are identified.   2. A personal and group Email account configuration was completed.   3. E-mail accounts are configured properly.   4. E-mails are sent and are received by the intended users/receiver.   5. E-mails are sorted and saved in proper folders   6. Address book are updated by addition of contacts, deletion, importing and other tasks.   7. E-mails are archived. |
| 1. Download Data | | * 1. Web contents are identified.   2. Data are downloaded from reliable and safe contents   3. The format and compatibility of downloaded contents are ensured are virus-free |
| 1. Upload data | | * 1. Data is form of text, pictures, videos and graphics are uploaded using proper online applications   2. Data are shared to the intended audience.   3. The profile/portfolio is updated. |

**RANGE OF VARIABLES**

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| --- | --- |
| 1. Routine Workplace | May include but not limited to:  1.1 Standard OHS information  1.2 Accomplishment Reports  1.3 Etiquette and netiquette |
| 1. Visual information | * 1. Documents web/online/readable formats   2. Forms and templates |
| 1. Appropriate Methods, Procedures | * 1. Saving   2. Browsing   3. Search   4. Research   5. File Management   6. Reporting   7. Quality standards   8. Portfolio Management |
| 1. Tools and Instruments | * 1. Computer   2. Peripherals   3. Internet connection   4. Installers: Software   5. Online References |

EVIDENCE GUIDE

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| 1. Critical aspects of competency | 1.1. Demonstrate the steps for Email account configuration.  1.2. Identify Errors while Email configuration.  1.3. Demonstrate sorting out of emails on the PC  1.4. Perform successfully sorting out of emails as per instructions.  1.5. Open address book.  1.6. Demonstrate the method of managing the address book by adding some contacts, removing contacts, importing, exporting sorting and updating etc.  1.7. Learn the procedure of Archiving Email data  1.8. Demonstrate practically the procedure of archiving emails, as per requirements  1.9. Perform the components of browsing as per given instructions.  1.10. Suffering through different sources and finding what’s required  1.11. Demonstrate the procedure of downloading data.  1.12. Demonstrate precautions to be taken to download data.  1.13. View this downloaded data any time, the format should be compatible and should be virus free.  1.14. Demonstrate the procedure to send an email.  1.15. Demonstrate the procedure to receive an Email.  1.16. Perform the components to send/Receive Emails.  1.17. Demonstrate the procedure to receive an Email and send an Email. |
| 1. Underpinning Knowledge and Attitude | Perform tasks and command on:   * 1. E-mail account creation and configuration   2. Web browser   3. Web technologies   4. Web applications   5. Classify, delete, Sort out email   6. Manage Address Book   7. Archiving, saving, e-mail Data   8. Perform Browsing and research task   9. Download Data, installers and relevant information   10. Send and receive e-mails   11. Netiquette |
| 1. Underpinning Skills | Possess skills on:   * 1. Searching   2. File management   3. Netiquette   4. Innovative skills   5. Portfolio management |
| 4. Resource implications | The following resources must be provided:   * 1. Lecture Room   2. Laboratory Room   3. Software   4. Online software applications   5. Internet connection   6. Work place procedure   7. Materials relevant to the proposed activity   8. All tools, equipment, material and documentation required   9. Relevant specifications or work instructions |
| * 1. Methods of Assessment | Competency must be assessed through:   * 1. Online and Written test   2. Oral questions   3. Online and Computer laboratory work outputs   4. Demonstration   5. Rubrics for laboratory work or outputs |
| 1. Context of Assessment | * 1. Competency should be assessed in the workshop or simulated environment.   2. Assessment must be undertaken in accordance with Lao PDR CBT Assessment guidelines. |

# List of Tools and Equipment

1. **Hardware (Class size: 20 trainees/student)**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Name of Equipment / Tools** | **Qty.** |
| 1. | Laptop: Latest Processor with licensed Operating System and Antivirus. | 1 |
| 2. | File server | 1 |
| 3. | LAB should have Structured cabling | 1 |
| 4. | Workstation/ Nodes (computer) with wired and wireless card (built-in) | 20 |
| 5. | Workstation for Multimedia | 1 |
| 6. | 24 Port switch with wireless connectivity | 1 |
| 7. | RJ 45 Connectors | 1 |
| 8. | Internet or Intranet Connectivity | 1 |
| 9. | On-Line UPS | 1 |
| 10. | Printer | 1 |
| 11. | Scanner | 1 |
| 12. | Web cam (digital camera) | 20 |
| 13. | DVD or BLU-RAY wrGDMr | 2 |
| 14. | Pen-drive | 20 |
| 15. | External Hard disks | 4 |
| 16. | DSL Wireless Router | 1 |
| 17. | Wireless Router | 1 |
| 18. | Wireless LAN Card | 1 |
| 19. | LCD Projector | 1 |
| 20. | Well equip computer lab with Multimedia Projector | 1 |
| 21. | Well equip class room with Multimedia Projector | 1 |
| 22. | Tool box | 2 sets |
| 23. | USB Floppy Drive | 1 |
| 24. | Network Switch | 4 |
| 25. | Router | 4 |
| 26. | UTP Cables |  |
| 27. | Crimping Tools |  |
| 28. | Network Tester |  |

1. **Software** 
   1. Professional Office (MS Office, Open Office)
   2. Keyboarding Software application
   3. Antivirus Software - Server Edition for Servers and Client Edition for Workstations
   4. Operating System (Windows, Linux)
   5. Web/Internet Browsing software
   6. Graphics Software (MS Paint, Open Office)
   7. Online Application Software

NOTE: Latest version of hardware and software should be provided

# CORE UNITS OF COMPETENCY

# ANNEX

* Lao World of Work
* Lao IT/ICT Sub Sector Codes
* Competency Map COMPUTER OPERATOR
* Competency Standards Development Team
* Notes/ References

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