**Southern province**

**Kamonyi district**

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| **Sector:** | **ICT&MULTIMEDIA** | **Trainer:** | **TUYISINGIZE Leonard** | |
| **Trade:** | **COMPUTER SYSTEM AND ARCHITECTURE** | **School Year:** | **2025-2026** | |
| **Qualification Title:** | **TVET Certificate III in Computer System and Architecture** | **Term:** | **ALL TERM** | |
| **RQF Level:** | **3** | **Module details** | | |
| **Module code and title** | | **CSAPA 301: ASSEMBLE PCB AND COMPUTER SYSTEM** |
| **Learning hours:** | | **80** |
| **Number of Classes:** | | **1** |
| **Date:** | **08/09/2025** | **Class Name:** | | **L3 CSA** |

**Runda sector**

**Runda TSS**

**Term: 1**

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| **Weeks** | **Competence code and name** | | | **Learning Activities** | **Resources (Equipment, tools, and materials)** | **Evidences of formative assessment** | **Learning Place** | **Observation** |
| **Learning outcome (LO)** | **Duration** | **Indicative content (IC)** |
| Week 1-12 (Sept 8 - Dec 19, 2024) | LO1: Prepare tools, materials and equipment LO2: Assemble desktop computers | 40 hours | IC1.1: Workplace preparation IC1.2: Tool identification IC2.1: Computer components IC2.2: Assembly procedures | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers,  routers | **Written and practical assessment** | **Class**  **Computer system and architecture Workshop** |  |
| **IC1.2:**  Identification of tools, materials and equipment | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers,  routers |
| **IC1.3:**  Calibration of equipment | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers,  Routers |
| **LO2**: **Assemble PCBA using SMT** | 50 hours | **IC2.1:** Introduction to PCB | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers,  routers | **Written and practical assessment** |  |  |
|  |  | **IC2.2:** Identification of PCBA technologies | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers,  routers |  |  |  |
|  | Integrated Assessment (for specific module) | | | Task | Consumables |  | workshop |  |

**Trainer’s name and signature: TUYISINGIZE Leonard**

**Term: 2**

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| **Weeks** | **Competence code and name** | | | **Learning Activities** | **Resources (Equipment, tools, and materials)** | **Evidences of formative assessment** | **Learning Place** | **Observation** |
| **Learning outcome (LO)** | **Duration** | **Indicative content (IC)** |
| Week 13-24 (Jan 5 - Apr 3, 2025) | LO3: Install operating systems LO4: Configure computer systems | 40 hours | IC3.1: OS installation IC3.2: Driver installation IC4.1: BIOS configuration IC4.2: System optimization | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers | **Written and practical assessment** | **Class**  **Computer system and architecture Workshop** |  |
| **IC2.4:**  **Perform SMT PCB Assembly process** | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers |
| Integrated Assessment (for specific module) | | | Task | Consumables |  | workshop |  |

**Trainer’s name and signature: TUYISINGIZE Leonard**

**Term: 3**

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| **Weeks** | **Competence code and name** | | | **Learning Activities** | **Resources (Equipment, tools, and materials)** | **Evidences of formative assessment** | **Learning Place** | **Observation** |
| **Learning outcome (LO)** | **Duration** | **Indicative content (IC)** |
| Week 25-36 (Apr 20 - Jul 3, 2025) | LO5: Troubleshoot hardware issues LO6: Maintain computer systems | 40 hours | IC5.1: Diagnostic procedures IC5.2: Component replacement IC6.1: Preventive maintenance IC6.2: Documentation | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers | **Written and practical assessment** | **Class**  **Computer system and architecture Workshop** |  |
| **IC1.2:**  **● Connection of Desktop Computer parts** | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers |
| **IC1.3:**  **Connection of Laptop Computer parts** | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers |
|  |  | **IC1.3:**  **Test of assembled computer** | ● Demonstration and simulation  ● Individual and group work  ● Practical exercise  ● Individualized  ● Trainer guided  ● Group discussion | Computers, Projector, Projection screen, Printers |  |  |  |
|  |  | **I.C 1.4 Documentation of Assembly report** | ● Individualized  ● Trainer guided  ● Group discussion | Computers, screen, Printers |  |  |  |
| 4 | Integrated Assessment (for specific module) | | | Task | Consumables |  | workshop |  |

**Prepared by: (Name, position and Signature) TRAINER: TUYISINGIZE Leonard**

**Verified by: (Name, position and Signature) DOS :**

**Approved by: (Name, position and Signature) SCHOOL MANAGER:**