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| Title | **Explain internet working** |
| Level | **2** | **Credits** | **3** |

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| Purpose | The competency standard is about introducing students to the web development process and imparting knowledge that will enable the learner to explain the internet and computer networks. |

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| Classification ISCED | 0613 Software and applications development and analysis |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **A1. Explain the history and evolution of internet** | **Trainee will be able to:****P1.** Recount different Eras of Internet Evolution**P2.** Use internet for:* Effective Research
* Preparing Reports
* Efficient Communication
* Getting Updates
* Different learning methods
 | **Trainee will be able to:****KI.** Define internet**K2.** Discuss the history and evolution of internet**K2.** Explain the working of internet |
| **A2: Define and differentiate software and hardware** | **Trainee will be able to:****P1.** Recount the history of Software Evolution**P2.** Identify different types of software like:* Application Software
* System Software

**P3.** Handle the working of different software:* Installation
* Implementation

**P4.** Recount the history of Hardware Evolution | **Trainee will be able to:****K1.** Define software**K2.** Spell out the role of software in a computer system**K3.** Explain different types of software**K4.** Elaborate the working of software**K5.** Define hardware**K6. E**xplicate the importance of hardware in a computer |

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|  | **P5.** Classify different components of Hardware like:* Input Devices (Keyboard, Mouse, Scanner, etc)
* Output Devices (Monitor, Printer, etc)

**P6.** Identify appropriate networking hardware including* routers, switches, hubs and gateways
* Cables
* Adapters
* servers, firewalls

**P7.** Identify the difference between software and hardware | system**K7.** Give in details of different hardware components in a computer**K8.** Label different hardware components in a computer**K9.** Define networking Hardware**K10.** List different networking hardware**K11.** Classify the difference between software and hardware |
| **A3: Elaborate the working of computer networks** | **Trainee will be able to:****P1.** Share understanding of network**P2.** Recall the history of network**P3.** Identify different Network topologies such as:* Bus topology
* Ring topology
* Star topology
* Mesh topology

**P4.** Recognise basic components of a computer network such as:* NIC (Network Interface Card)
 | **Trainee will be able to:****K1.** Define a network**K2.**Recount the history of networks**K3.** Generelise network topologies**K4.** List the basic components of a computer network |

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|  | * Hub
* Switch
* Router
* Network Cables

**P5.** Identify computer networks | **K5.** Explain the working of a computer network |
| **A4: Differentiate different types of networks** | **The trainee will be able to:****P1.** Identify the different types of network and their functionality such as:* Personal Area Network
* Local Area Network
* Campus Area Network
* Metropolitan area network
* Wide Area Network
* Virtual Private Network

**P2.** Categorise different network types | **The trainee will be able to:****K1.** List down the different types of network in order of scalability**K2.** Elaborate the functionality of different types of network**K3.** Describe the difference between different types of networks |