

Theory and Foundation**Overall Expectations**

- TFV.01 · explain current hardware and software trends;
- TFV.02 · describe network topologies and associated hardware;
- TFV.03 · document computer-related safety practices;
- TFV.04 · describe professional customer service practices.

Hardware, Interfaces, and Networking Systems

- TF1.01 – use relevant technical terminology to describe hardware and software;
- TF1.02 – describe current storage devices;
- TF1.03 – describe current input and output devices;
- TF1.04 – demonstrate an awareness of current trends in hardware development;
- TF1.05 – describe the relationship between available software products and user requirements;
- TF1.06 – explain the relationship between hardware limitations and software requirements;
- TF1.07 – describe common network topologies;
- TF1.08 – identify hardware required to set up different types of networks;
- TF1.09 – document correct procedures for handling components that use electrical power.

Customer Service

- TF2.01 – develop effective procedures for tracking client contact;
- TF2.02 – describe computer support hierarchies in small, medium, and large organizations;
- TF2.03 – explain the importance of maintaining professional standards in communications;
- TF2.04 – follow established problem-solving procedures when dealing with clients.

Skills and Processes**Overall Expectations**

- SPV.01 · develop maintenance and repair protocols;
- SPV.02 · customize utility and application software appropriately to meet user needs;
- SPV.03 · effectively administer and troubleshoot a network configuration and related services;
- SPV.04 · recommend solutions to fulfil user computing requirements;
- SPV.05 · communicate effectively with customers.

Hardware, Interfaces, and Networking Systems

- SP1.01 – analyse user hardware and software needs;
- SP1.02 – write recommendation reports based on user requirements;
- SP1.03 – compare hardware and software costs from local, national, or global suppliers;
- SP1.04 – use technical information from a variety of sources to solve problems;
- SP1.05 – use utility software efficiently to diagnose and correct problems;
- SP1.06 – properly install and configure new software and upgrades;
- SP1.07 – establish troubleshooting procedures;
- SP1.08 – solve problems using data from diagnostic tools;
- SP1.09 – properly install and configure expansion components (e.g., video/network/modem cards, random access memory, secondary storage devices);

- SP1.10 – properly install devices on networks or stand-alone workstations;
- SP1.11 – perform basic maintenance on peripherals;
- SP1.12 – design effective backup protocols;
- SP1.13 – demonstrate an ability to use manuals and on-line documentation to master new software;
- SP1.14 – establish glossaries of common computer terms and acronyms;
- SP1.15 – prepare storage media for use;
- SP1.16 – effectively critique computer advertisements;
- SP1.17 – properly set up and configure a networked workstation;
- SP1.18 – design office computer set-ups that include technical and ergonomic considerations.

Customer Service

- SP2.01 – use computer terminology correctly in dealing with customers;
- SP2.02 – communicate effectively with clients and managers;
- SP2.03 – provide user-level support for software use;
- SP2.04 – establish databases for the maintenance of customer service records;
- SP2.05 – apply hardware, software, and networking skills in a real-world setting (e.g., user assistance).

Impact and Consequences

Overall Expectations

- ICV.01 · describe issues related to the ethical use of computers;
- ICV.02 · identify skill sets required for the workplace;
- ICV.03 · identify workplace opportunities and the need for lifelong learning;
- ICV.04 · communicate and work effectively individually and in groups.

Specific Expectations

- IC1.01 – describe the components of an acceptable use policy for computers;
- IC1.02 – follow proper software licensing and registration procedures;
- IC1.03 – explain the importance of maintaining customer confidentiality;
- IC1.04 – describe job opportunities in local business and industry;
- IC1.05 – explain the need for lifelong learning in the computer industry;
- IC1.06 – identify opportunities for further training and certification;
- IC1.07 – use time management skills and constructive criticism in project settings;
- IC1.08 – communicate effectively both orally and in writing;
- IC1.09 – use appropriate strategies to avoid potential health and safety problems associated with computer use, such as musculo-skeletal disorders and eye strain