Apprenticeship Training Standard

Information Technology Network Technician

Trade Code: 634C

Development Date: 2006

This document is the property of the apprentice named inside and represents the official record of his/her training.
Please Note: Apprenticeship Training and Curriculum Standards were developed by the Ministry of Training, Colleges and Universities (MTCU). As of April 8th, 2013, the Ontario College of Trades (College) has become responsible for the development and maintenance of these standards. The College is carrying over existing standards without any changes.

However, because the Apprenticeship Training and Curriculum Standards documents were developed under either the Trades Qualification and Apprenticeship Act (TQAA) or the Apprenticeship and Certification Act, 1998 (ACA), the definitions contained in these documents may no longer be accurate and may not be reflective of the Ontario College of Trades and Apprenticeship Act, 2009 (OCTAA) as the new trades legislation in the province. The College will update these definitions in the future.

Meanwhile, please refer to the College’s website (http://www.collegeoftrades.ca) for the most accurate and up-to-date information about the College. For information on OCTAA and its regulations, please visit: http://www.collegeoftrades.ca/about/legislation-and-regulations
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Program Definition:  **Network Technician** is defined as a person who,

- installs, configures and maintains client workstations and network servers connected by a local area network
- applies technical knowledge of data communication, standards, protocols and internet working concepts

**Network Technician** is an approved apprenticeship program for the purposes of the *Apprenticeship and Certification Act, 1998 (ACA).*

Program Guidelines

- **On-The-Job Training Duration (for apprentices)**  
  The Industry Committee has identified **6,340** hours as the duration generally necessary for any apprentice to become competent in the skills required. There may be individual circumstances in which the duration varies from this guideline.

- **In-School Training Duration**  
  The Industry Committee has identified **720** hours of in-school training as the duration generally necessary for an apprentice to complete the in-school curriculum for this program, except where an apprentice has been exempted from any level of that curriculum.
**Program Requirements**

- **Restricted Skill Sets**
  This program does not contain any restricted skill sets as per Ontario Regulation 565/99, Restricted Skill Sets. Therefore, an individual is not required to be a registered apprentice or possess certification in order to perform skills contained in the program.

- **Academic Standard**
  The Industry Committee has identified the minimum academic standard for entry to this program as completion of Grade 12 or ministry-approved equivalent.

  (See ACA Policy 102, Confirming Academic Requirements)

- **Eligibility for Program Completion (for Apprentices)**
  The apprentice must:
  - achieve competency in all mandatory (unshaded) skills as identified in the Training Standard or Schedule of Training.
  - complete the in-school training as outlined in the industry and ministry-approved Curriculum Standard.

  (ACA Policy 309, Completion of an Apprenticeship Program)

- **Other Resources**
  Complete program requirements, policies, and standards can be obtained by referring to the following resources:
  - *Apprenticeship and Certification Act, 1998 (ACA)*;
  - ACA General Regulation 573/99;
  - ACA Exemption Regulation 566/99;
  - Program-specific Apprenticeship Training Standard or Schedule of Training;
  - ACA Program and Policy Manual
- **Other Required Certification**
  N/A

- **Academic Background**
  Industry has identified relevant secondary school course(s) likely to increase an individual’s chances of success if completed prior to program entry. For details, see the document Apprenticeship Subject Pathways.
## Competency Analysis Profile

**Information Technology Network Technician - 634C**

*(All unshaded skill sets must be demonstrated/completed)*

<table>
<thead>
<tr>
<th>Skill Sets</th>
<th>Skills</th>
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<td><strong>Protect Self and Others</strong></td>
<td>6270.0 Identify and take preventative action against potential workplace environment, health and safety hazards</td>
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<td>Handle, store and recycle hazardous workplace materials</td>
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<td>Wear and maintain personal protective equipment</td>
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<td>Practise good housekeeping in the workplace by applying fire hazard prevention methods</td>
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<td>Comply with Workplace Hazardous Materials Information System (WHMIS) guidelines</td>
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<td><strong>Demonstrate Quality Customer Service and Communication Skills</strong></td>
<td>6271.0 Use active listening techniques.</td>
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<td>Use effective speaking techniques.</td>
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<td>Prepare written and typed communication</td>
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<td></td>
<td>Work as part of a team</td>
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<td></td>
<td>Liaise with vendors to acquire hardware and software components</td>
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<td><strong>Create and Maintain Documentation</strong></td>
<td>6272.0 Create documentation</td>
</tr>
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<td>Record issue diagnosis and resolution</td>
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<td><strong>Configure, Service, and/or Replace Micromcomputer Systems</strong></td>
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<td>Diagnose and troubleshoot microcomputer systems</td>
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<td>Skill Area</td>
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<td>INSTALL AND SUPPORT MICROCOMPUTER OPERATING SYSTEMS</td>
<td>Visually inspect microcomputer operating systems</td>
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<td>INSTALL AND USE SOFTWARE APPLICATIONS</td>
<td>Visually inspect software applications</td>
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<td>OPERATE NETWORKING ENVIRONMENT</td>
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<td>IMPLEMENT LOGICAL TROUBLE-SHOOTING TECHNIQUES</td>
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<tr>
<td>IDENTIFY AND SERVICE CABLES AND CONDUITS</td>
<td>Visually inspect cables and conduits</td>
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<td>DESIGN NETWORK INFRASTRUCTURE ENVIRONMENT</td>
<td>Visually inspect electrical and electronic components</td>
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<td>INSTALL AND CONFIGURE A NETWORK ENVIRONMENT</td>
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<th>OPTIMIZE AND MAINTAIN A NETWORKING ENVIRONMENT</th>
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<th>Diagnose and troubleshoot the network environment</th>
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<th>Verify networking solution allowing for network growth</th>
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PREFACE

This training standard was developed by the Ministry of Training Colleges, and Universities (MTCU), in partnership with the Industry Advisory Committees and in consultation with representatives from the industry. This document is intended to be used by apprentice, supervisor/trainer and sponsor/employer as a "blueprint" for training and as a prerequisite for completion and certification.

This training document becomes the apprentice’s only record of workplace training performance.

Supervisor/trainer and apprentice are required to sign off and date the skills following each successful acquisition, unless a skill is marked shaded (optional).

The care and maintenance of this training document are the joint responsibility of the apprentice and the sponsor/employer. By signing off the skill, the supervisor/trainer and the apprentice are indicating that the apprentice has demonstrated competence of the skill. This training standard has been developed specifically for documenting the apprentices acquisition of skills of the trade.
DEFINITIONS

ACA
Apprenticeship and Certification Act, 1998

Certificate of Apprenticeship (CofA)
Certification issued to individuals who have demonstrated that they have completed an apprenticeship in Ontario.

Certificate of Qualification (CofQ)
Certification issued to C of Q applicants who have achieved a passing grade on the certification exam for their trade.

Competency Analysis Profile
A document that identifies the training needs of an individual trade and details the skills/skill sets that must be demonstrated.

Competence
The ability of an individual to perform a skill repeatedly and without assistance in the workplace to the standard set out in the Training Standard or Schedule of Training.

General Performance Objective (On-the-job Skill Set)
Describes set of skills which include all performance objectives under that skill set.

Industry Committee (IC) - under the ACA and Provincial Advisory Committee (PAC) under the TQAA
Under the ACA and TQAA, the Minister may appoint a provincial committee in any trade or group of trades to advise the Minister in matters relating to the establishment and operation of apprenticeship training programs and trades qualifications.

Journeyperson or Equivalent
A person who has acquired the knowledge and skills in a trade, occupation or craft as attested to by a provincial or territorial authority.

Mandatory
Status assigned to unshaded individual skills, skill sets or general performance objective which must be signed off for the apprentice to complete their program.

Optional
Status assigned to shaded individual skills, skills sets or general performance objective for which sign-off is not required for the apprentice to complete the program.

Sign-off
Signature of the sponsor/employer of record or an individual, to whom that sponsor or employer has delegated signing authority, indicating an apprentice’s achievement of competence.
Skill
Individual skill described in the Training Standard (note: does not mean the larger skill groups referred to in the Training Standard as Skill Sets, Training Units, or General Performance Objective, but the individual skills that make up those groups).

Skill Sets
Group of individual skills found in the Training Standard (may also be called Training Unit or General Performance Objective)

Skill Set Completion Form
Lists all skill sets and includes space for sign-off by sponsor/employer of record.

Sponsor/Employer
Means a person that has entered into a registered training agreement under which the person is required to ensure that an individual is provided with workplace-based training in a trade, other occupation or skill set as part of an apprenticeship program approved by the Director.

Sponsor/Employer of Record
Refers to the sponsor or employer documented as the signatory to the current training agreement or contract. In order for a sponsor/employer to be considered for the training of apprentices, they must identify that the workplace has qualified journeypersons or equivalent on site and can identify that the workplace has the tools, equipment, materials, and processes which have been identified by Provincial Advisory Committees (PACs) or Industry Committees (ICs) to be required for the trade.

Supervisor
An individual who oversees the execution of a task, oversees the actions or work of others.

Trainer
A qualified trainer in a compulsory trade is a journeyperson with a Certificate of Qualification or in a voluntary trade is an individual who is considered equivalent to a journeyperson with a Certificate of Qualification.

TQAA
Trades Qualification and Apprenticeship Act.

Training Standard
A document that has been written in concise statements, which describe how well an apprentice must perform each skill in order to become competent. In using the document, trainers will be able to ensure that the apprentice is developing skills detailed for the occupation.
IMPORTANT DIRECTIONS

Apprentice

1. All complete skills or skill sets must be signed and dated by both the apprentice and sponsor/employer when either all terms of the contract have been completed or the apprentice leaves the employ of the employer.

2. It is the responsibility of the apprentice to inform the local Apprenticeship Client Services Office regarding the following changes:
   - change of sponsor/employer address;
   - change of apprentice name or address;
   - transfer to a new sponsor/employer.

3. The Skill Set Completion Form must be completed and signed by the current sponsor/employer and presented to the local Apprenticeship Client Services Office at the fulfillment of all terms of a Contract of Apprenticeship/Training Agreement.

4. The apprentice completion form with the Completed and Authorized Training Standard must be presented to the local Apprenticeship Client Services Unit.

Sponsors/Employers and Supervisors/Trainers

The Training Standard identifies skills required for this trade/occupation and its related training program.

This Training Standard has been written in concise statements which describe how an apprentice must perform each skill in order to become competent. Competence means being able to perform the task to the required standard.

In using this Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing the skills detailed for the trade/occupation.

Supervisors/Trainers and apprentices are required to sign off and date the skills following each successful acquisition.

Sponsors/Employers participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each skill set.
NOTICE OF COLLECTION OF PERSONAL INFORMATION

1. At any time during your apprenticeship training, you may be required to show this training standard to the Ministry of Training, Colleges and Universities (the Ministry). You will be required to disclose the signed Apprenticeship Completion form to the Ministry in order to complete your program. The Ministry will use your personal information to administer and finance Ontario’s apprenticeship training system, including confirming your completion and issuing your certificate of apprenticeship.

2. The Ministry will disclose information about your program completion and your certificate of apprenticeship to the Ontario College of Trades, as it is necessary for the College to carry out its responsibilities.

3. Your personal information is collected, used and disclosed by the Ministry under the authority of the Ontario College of Trades and Apprenticeship Act, 2009.

4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre
Ministry of Training, Colleges and Universities
33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3
Toll-free: 1-800-387-5656; Toronto: 416-326-5656
ROLES & RESPONSIBILITIES OF APPRENTICE, SPONSOR/EMPLOYER AND SUPERVISOR/TRAINER

Apprentice  “Apprenticeship is Learning On-the-job”

- Practice safe work habits.
- Use your apprenticeship training standard as a journal to keep track of which skills you have achieved.
- Talk over your training plan with your Training Consultant, Employer, Union, or Sponsor.
- Know what tools are required for your trade and how to use them.
- Ask questions and keep asking.
- Talk to your employer about your training needs.
- Demonstrate enthusiasm and good work habits.
- Ensure that you and your supervisor/trainer sign off skill/skill sets upon demonstration of competency.

Sponsor/Employer  “Training is an Investment”

- Demonstrate safe work habits.
- Attest to successful achievement by signing the skill/skills sets.
- Provide opportunities and time for the apprentice to learn the trade.
- Offer practical trade training experiences that cover all of the skill sets.
- Foster work ethics that support training while minimizing productivity losses.
- Set out clear expectations, then recognize or reward performance excellence.
- Involve both the apprentice and supervisor/trainer in developing the training plan.
- Use the Training Standard as a monitoring tool and part of regular performance evaluations.
- Select supervisors/trainers with good communication skills and who work well with others.
- Encourage supervisors/trainers to take upgrading courses - (e.g. Train the Trainer, Mentor Coach, etc).
- Complete the Skill Set Completion Form once the apprentice has demonstrated competency in the training.
- Ensure that the apprentice always works under the direction of or has access to a qualified supervisor/trainer.
- Vary the apprentice’s exposure to all the skills set out in the training standard.
Supervisor/Trainer

- Demonstrate safe work habits.
- Treat apprentices fairly and with respect.
- Use the Training Standard as a guide to evaluating competence in each skill area. In using the Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing skills detailed for the trade/occupation.
- Review the Training Standard with the apprentice and develop a training plan.
- Respond fully to all questions.
- Be patient. Explain what is to be done then, show how it is done, and then let the apprentice demonstrate the task.
- Provide continuous feedback.
- Sign off individual skills/skill sets once the apprentice demonstrates competence in the skill.

Suggestions for Assessing the Progress of the Apprentice in the Workplace

- Use informal daily observation.
- Provide constructive feedback to build confidence.
- Allow the supervisor/trainer time to teach and demonstrate the skills.
- Take prompt action when problems occur.
- Conduct regular performance reviews involving the apprentice, supervisor/trainer, and sponsor/employer.
- Use the Training Standard as the reference for establishing the competency of the apprentice.
• **SKILL SET COMPLETION FORM**

<table>
<thead>
<tr>
<th>SKILLS SETS</th>
<th>TITLE</th>
<th>SIGNING AUTHORITY</th>
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<tbody>
<tr>
<td>6270.0</td>
<td>PROTECT SELF AND OTHERS</td>
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<tr>
<td>6271.0</td>
<td>DEMONSTRATE QUALITY CUSTOMER SERVICE &amp; COMMUNICATION SKILLS</td>
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<td>6272.0</td>
<td>CREATE AND MAINTAIN DOCUMENTATION</td>
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<td>CONFIGURE, SERVICE AND/OR REPLACE MICROCOMPUTER SYSTEMS</td>
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<td>OPERATE A NETWORKING ENVIRONMENT</td>
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<td>6277.0</td>
<td>IMPLEMENT LOGICAL TROUBLESHOOTING TECHNIQUES</td>
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<td>IDENTIFY AND SERVICE CABLE AND CONDUITS</td>
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<td>6292.0</td>
<td>REPAIR A NETWORK ENVIRONMENT</td>
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<td>6293.0</td>
<td>IMPLEMENT DISASTER RECOVERY PROCEDURE</td>
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<td>6294.0</td>
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<td>6295.0</td>
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**NOTE ON SHADED PERFORMANCE OBJECTIVES AND SKILLS**

- Shaded performance objectives and skill sets are optional. The shaded skills do not have to be demonstrated or signed off on for completion of the on-the-job component of the apprenticeship.
- The in-school curriculum learning outcomes will cover all the skill sets, both shaded and unshaded.
- The Certificate of Qualification examination will test the whole of the trade and may test both shaded and unshaded performance skill sets.
6270.0 PROTECT SELF AND OTHERS

GENERAL PERFORMANCE OBJECTIVE

Comply with occupational health and safety procedures by identifying potential workplace health and safety hazards, handling, storing and disposing of hazardous materials, wearing and maintaining personal protective equipment, complying with workplace-related legislation, interpreting and applying service-related information, practicing good housekeeping in the workplace, complying with Environmental Protection Act and Workplace Hazardous Materials Information System (WHMIS) guidelines according to Occupational Health & Safety Act, manufacturers’ recommendations, specifications and government regulations.

SKILLS

6270.01 Identify and take preventative action against potential workplace environmental, health and safety hazards including adhesives, dust fumes, soldering fumes, sound levels, electrical and mechanical hazards, e.g. damaged electrical cables and/or inadequate ventilation, so that potential for personal injury, damage to equipment and the environment are minimized according to Occupational Health & Safety Act, manufacturers’ recommendations, specifications and government regulations.

Date Completed Apprentice Supervisor/Trainer

6270.02 Handle, store and recycle hazardous workplace materials including new and used lubricants and fluids, gases, toners, inks, solvents, filters and adhesives using personal protective equipment and specified handling, storage and recycling equipment so that individuals are protected from injury, the environment from contamination and safety procedures are followed according to Occupational Health & Safety Act, manufacturers’ recommendations, specifications and government regulations.

Date Completed Apprentice Supervisor/Trainer
6270.0  PROTECT SELF AND OTHERS – Cont’d

6270.03  Wear and maintain personal protective equipment including eye, ear, hand, respiratory, body and foot protection ensuring that correct fit and optimum protection is provided to the wearer for the specific task performed according to Occupational Health & Safety Act, manufacturers’ recommendations, specifications and government regulations.

Date Completed __________ Apprentice __________ Supervisor/Trainer __________

6270.04  Comply with workplace-related legislation including Occupational Health and Safety Act and the Environmental Protection Act by identifying the personal and legal liabilities of technicians and employers when performing and/or conducting work estimates and repairing and/or replacing damaged components according to Occupational Health & Safety Act, manufacturers’ recommendations, specifications and government regulations.

Date Completed __________ Apprentice __________ Supervisor/Trainer __________

6270.05  Practice good housekeeping in the workplace by applying fire hazard prevention methods including maintaining a clean and orderly work area, identifying, removing and disposing of potential fire hazards, cleaning up grease, oil and/or fluids, ensuring work area is free of obstructions and safely using, storing and maintaining equipment, tools and shop safety equipment to minimize accident or injury to self and others according to Occupational Health & Safety Act, manufacturers’ recommendations, specifications and government regulations.

Date Completed __________ Apprentice __________ Supervisor/Trainer __________
6270.0 PROTECT SELF AND OTHERS – Cont’d

6270.06 Comply with Workplace Hazardous Materials Information System (WHMIS) Guidelines including reading and interpreting labels and Material Safety Data Sheets (MSDS) and ensuring receipt of training in WHMIS regulations and practices according to the Occupational Health and Safety Act.

Date Completed       Apprentice        Supervisor/Trainer

Sponsor/Employer Name            Sponsor/Employer Signature
6271.0 DEMONSTRATE QUALITY CUSTOMER SERVICE & COMMUNICATION SKILLS

GENERAL PERFORMANCE OBJECTIVE

Demonstrate quality customer service and communication skills including listening, speaking, teamwork, public relations, conflict resolution, logical reasoning, critical thinking and problem solving by professionally interacting with customers, colleagues, supervisors and manufacturers, according to company policies and customer satisfaction.

SKILLS

6271.01 Use active listening techniques to avoid distractions, interrupting only to redirect or focus, carefully clarifying, paraphrasing and summarizing when necessary, visualizing the user’s screen based on verbal description of the problem, taking notes to assist in accurate interpretation to establish resolution or enable further diagnosis and/or communication when interacting with customers, colleagues, supervisors, and manufacturers according to company policies and procedures.

Date Completed __________ Apprentice __________ Supervisor/Trainer __________

6271.02 Use effective speaking techniques by using proper business language in a pleasant, professional tone with appropriate clarity, volume and speed of speech, avoiding use of jargon and creating simple visuals to illustrate equipment or procedures while leading a client or peer through technical procedures using telephones, voice mail recordings and formal presentations when interacting with customers, colleagues, supervisors and manufacturers according to company policies and procedures.

Date Completed __________ Apprentice __________ Supervisor/Trainer __________

6271.03 Prepare written and typed communications including memos, letters, time sheets and inspection, testing, performance, progress and incident reports in proper business and technical language recording all information accurately using internal and external forms and format when communicating with customers, colleagues, supervisors and manufacturers according to company policies and procedures.

Date Completed __________ Apprentice __________ Supervisor/Trainer __________
6271.0 DEMONSTRATE QUALITY CUSTOMER SERVICE & COMMUNICATION SKILLS – Cont’d

6271.04 Work as part of a team by communicating effectively with others, identifying methods for developing personal networks, cooperating with colleagues as a team member or leader and dealing effectively with workplace stress and conflict resolution according to company policies, procedures and customer satisfaction.

Date Completed Apprentice Supervisor/Trainer

6271.05 Liaise with vendors to acquire hardware and software components by accessing and researching vendor databases to project specifications, identifying key industry contacts, determining costs of materials that comply with project specifications and practising personal and professional ethics specific to the industry according to company policies and procedures, manufacturers’ specifications and customer satisfaction.

Date Completed Apprentice Supervisor/Trainer

6271.06 Handle workload completion to meet target deadlines and ensure customer satisfaction by employing methods to prioritize tasks, developing strategies to cope with multi-tasking, scheduling and coordinating response time, determining timelines for problem solving, identifying service-level objectives, escalating problems to appropriate level and person and conducting quality service follow-up according company policies and procedures.

Date Completed Apprentice Supervisor/Trainer

Sponsor/Employer Name Sponsor/Employer Signature
INFORMATION TECHNOLOGY NETWORK TECHNICIAN

6272.0 CREATE AND MAINTAIN DOCUMENTATION GENERAL PERFORMANCE OBJECTIVE
Create and maintain accurate documentation by reviewing and documenting issue resolution according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6272.01 Create documentation including customer information, product and installation specifications, workstation environment, and operating system data using internal and external forms and format according to company policy and procedures, customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6272.02 Record issue diagnosis and resolution including hardware and software information, user data, peripherals, cabling, and client situation by interacting with client, capturing pre-defined solutions using quality customer service standards, manufacturers’ manuals, resource data base and diagnostic tools according to company policy and procedures, customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6272.03 Verify accuracy of issue and document resolution including customer feedback through testing and analysing performance and function using quality customer service standards, manufacturers’ manuals, resource data base, diagnostic and operating system troubleshooting tools according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer
6272.0 CREATE AND MAINTAIN DOCUMENTATION –Cont’d

6272.04 Review and document issue resolution and any modifications including manufacturers’ manuals, resource data base, diagnostic tools, operating system and troubleshooting tools by communicating solution to user, identifying trends and updating and record internal and external resources according to company specific standard operating procedures, customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

Sponsor/Employer Name  Sponsor/Employer Signature
GENERAL PERFORMANCE OBJECTIVE

Configure, service and/or replace microcomputer systems by visually inspecting, diagnosing, troubleshooting, and verifying performance and function according to customer satisfaction, industry standards, and within manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6273.01 Visually inspect microcomputer systems including peripherals, cabling, documentation, software, processors, memory sub system, graphics and direct access storage devices; checking for worn, loose, defective, damaged and missing components, error indicators, power source, communications, hardware and software configuration, temperature, humidity, ventilation, dust, spillage and other environmental conditions according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6273.02 Set up microcomputer systems and peripherals including peripherals, cabling, documentation and software, processors, memory sub system, graphics and direct access storage devices by assembling and installing components, using service and installation documentation, block/schematic diagrams, software media kit, vendor resources and hand, power and electronic service tools and equipment according to customer satisfaction, industry standards and within manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer
6273.0 CONFIGURE, SERVICE AND/OR REPLACE MICROCOMPUTER SYSTEMS – Cont’d

6273.03 Diagnose and troubleshoot microcomputer systems including peripherals, cabling, documentation, software, processors, memory sub system, graphics, and direct access storage devices by visually inspecting, testing, analysing performance and function checking for worn, loose, defective, damaged and missing components, error indicators, power source, communications, hardware and software configuration, temperature, humidity, ventilation, dust, spillage and other environmental conditions using sensory indicators, manufacturers’ manuals and software, diagnostic utilities, customer applications, hand, power, electrical, electronic service tools and equipment according to customer satisfaction, industry standards and within manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6273.04 Service and/or configure microcomputer systems including peripherals, cabling, documentation, software, processors, memory sub system, graphics, and direct access storage devices by exchanging, reconditioning, reconfiguring or servicing using sensory indicators, manufacturers’ manuals and software, diagnostic utilities, customer applications, hand, power, electrical, electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer
6273.0 CONFIGURE, SERVICE AND/OR REPLACE MICROCOMPUTER SYSTEMS – Cont’d

6273.05 Verify service and/or configuration of microcomputer systems including peripherals, cabling, documentation, software, processors, memory subsystem, graphics and direct access storage devices by visually inspecting, testing, analysing performance and function using sensory indicators, manufacturers’ manuals and software, diagnostic utilities, customer applications, hand, power, electrical, electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

Sponsor/Employer Name  Sponsor/Employer Signature
6274.0 INSTALLED AND SUPPORT MICROCOMPUTER OPERATING SYSTEMS

GENERAL PERFORMANCE OBJECTIVE

Install and support microcomputer operating systems by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards and within manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6274.01 Visually inspect microcomputer operating systems including base operating system and device drivers, installation and/or configuration documentation and software media kits checking for hardware and software specifications, licence agreements, preparation steps and start up sequence according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6274.02 Install microcomputer operating systems including device drivers and required supporting applications by following preparation steps and installation and/or configuration documentation using installation and/or configuration documentation, licence agreements, and software media kits according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer
6274.0 INSTALL AND SUPPORT MICROCOMPUTER OPERATING SYSTEMS – Cont’d

6274.03 Diagnose and troubleshoot microcomputer operating systems including device drivers and software applications by visually inspecting, testing, analysing performance and function checking for error indicators, hardware and software failures, viruses, device conflicts, system lockups, environmental conditions, and performance inhibitors using installation and/or configuration documentation, internal and external resources and diagnostic utilities according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed _______ Apprentice _______ Supervisor/Trainer _______

6274.04 Repair microcomputer operating systems including device drivers and software applications by exchanging, reinstalling or configuring using installation and/or configuration documentation, internal and external resources and diagnostic utilities according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed _______ Apprentice _______ Supervisor/Trainer _______

6274.05 Verify the installation and repair of microcomputer operating systems including device drivers, software applications and vendor supported peripheral devices by visually inspecting, testing, analysing performance and function using installation and/or configuration documentation, internal and external resources and diagnostic utilities according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed _______ Apprentice _______ Supervisor/Trainer _______

Sponsor/Employer Name _______ Sponsor/Employer Signature _______
6275.0 INSTALL AND USE SOFTWARE APPLICATIONS

GENERAL PERFORMANCE OBJECTIVE

Install and use software applications by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6275.01 Visually inspect software applications including word processor, spreadsheet, database, web browser, utilities, email, graphic/video applications checking for installation and license agreements according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed _______ Apprentice _______ Supervisor/Trainer _______

6275.02 Install software applications including word processor, spreadsheet, database, web browser, utilities, email, and graphic/video applications by installing and/or configuring using installation and/or configuration documentation, licence agreements, software media kits and internal and external resources according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed _______ Apprentice _______ Supervisor/Trainer _______

6275.03 Diagnose and troubleshoot software applications including word processor, spreadsheet, database, web browser, utilities, email, graphic/video applications by visually inspecting, testing, analysing performance and function checking for error indicators, compatibility, valid licence agreements, viruses, configuration, security devices using installation and/or configuration documentation, licence agreements, software media kits and internal and external resources according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed _______ Apprentice _______ Supervisor/Trainer _______
6275.0 INSTALL AND USE SOFTWARE APPLICATIONS – Cont’d

6275.04 **Configure software applications** including word processor, spreadsheet, database, web browser, utilities, email, graphic/video applications by adding licenses, modifying permissions and/or configuration, verifying security devices, removing viruses, verifying compatibility, recommending user training, adding or applying service pack or patch level, restoring data, installing or reinstalling software applications using installation and/or configuration documentation, licence agreements, software media kits and internal and external resources according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  
Apprentice  
Supervisor/Trainer

6275.05 **Verify configuration of software applications** including word processor, spreadsheet, database, web browser, utilities, email, graphic/video applications by visually inspecting, testing, analysing performance and function using installation and/or configuration documentation, licence agreements, software media kits and internal and external resources according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  
Apprentice  
Supervisor/Trainer

Sponsor/Employer Name  
Sponsor/Employer Signature
6276.0 OPERATE A NETWORKING ENVIRONMENT

GENERAL PERFORMANCE OBJECTIVE

Operate a networking environment by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards and within manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6276.01 Visually inspect a networking environment including server platform, network, hardware and software components, power source, network interface cards, network attached peripherals and end user data checking for connectivity and environmental conditions according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

6276.02 Diagnose and troubleshoot a networking environment including server platform, network hardware and software components, power source, network interface cards, network attached peripherals and end user data by visually inspecting, testing and analysing performance and function checking for power sources, error indicators, connectivity, configuration, compatibility, security, environmental conditions and user information using software utilities, configuration documentation, internal / external resources and sensory indicators according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.
6276.0 OPERATE A NETWORKING ENVIRONMENT – Cont’d

6276.03 Control a networking environment including server platform, network hardware / software components, power source, network interface cards, network attached peripherals and end user data by inspecting, deploying and migrating using software utilities, configuration documentation, internal / external resources and sensory indicators according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6276.04 Verify the operation of a networking environment including server platform, network hardware and software components, power source, network interface cards, network attached peripherals, and end user data by visually inspecting, testing, analysing performance and function using software utilities, configuration documentation, and internal / external resources according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

Sponsor/Employer Name Sponsor/Employer Signature
IMPLEMENT LOGICAL TROUBLESHOOTING TECHNIQUES

GENERAL PERFORMANCE OBJECTIVE

Perform logical troubleshooting techniques by diagnosing, troubleshooting, verifying performance and function and reviewing and documenting issue resolution according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6277.01 Obtain preliminary information including customer and product information checking operating system, workstation environment and product installation specifications according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ________________ Apprentice ________________ Supervisor/Trainer ________________

6277.02 Diagnose, troubleshoot, prioritize and plan issue resolution including hardware, software, user, peripherals, cabling, workstation environment and client situation by interacting with client and suggesting pre-defined solutions checking for error indicators, sensory indicators, connectivity and performance inhibitors using diagnostic tools, hardware / software utilities, manufacturers’ manuals, internal / external resources according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ________________ Apprentice ________________ Supervisor/Trainer ________________
6277.0 IMPLEMENT LOGICAL TROUBLESHOOTING TECHNIQUES – Cont’d

6277.03 Implement issue resolution including hardware, software, peripherals, workstation environment and client situation by communicating, servicing, exchanging, reinstalling, configuring and escalating using quality customer service standards, manufacturers’ manuals, resource data base, diagnostic and operating system troubleshooting tools according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

6277.04 Verify the implementation of issue resolution by inspecting, testing and analysing performance and function using customer feedback, quality customer service standards, manufacturers’ manuals, resource database, diagnostic and operating system troubleshooting tools according to customer satisfaction and industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

6277.05 Document and report issue resolution by communicating solution to user, updating and reporting to internal and external resources using company specific standard operating procedures according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

Sponsor/Employer Name  Sponsor/Employer Signature
6278.0 IDENTIFY AND SERVICE CABLES AND CONDUITS

GENERAL PERFORMANCE OBJECTIVE

Identify and test cables and conduits by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6278.01 Visually inspect cables and conduits including labelling, network, serial, parallel, USB / USB2, fire wire, optical fibre, and data cables checking for connectivity, cable type, breaks, fraying, shielding, environmental interference, connector types, length and fastening and mounting devices according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6278.02 Diagnose and troubleshoot cables and conduits including labelling, network, serial, parallel, USB / USB2, fire wire, optical fibre and data cables by visually inspecting, testing and analysing performance and function checking for connectivity, cable type, breaks, fraying, shielding, environmental interference, connector types and fastening and mounting devices using software utilities, environmental measurement tools, documentation and hand, power, electrical, electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer
6278.0 IDENTIFY AND SERVICE CABLES AND CONDUITS – Cont’d

6278.03 Repair and/or replace cables and conduits including labelling, network, serial, parallel, USB / USB2, fire wire, optical fibre, and data cables by replacing, reconditioning or servicing using software utilities, environmental measurement tools, documentation and hand, power, electrical, electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6278.04 Verify the repair and/or replacement of cables and conduit including labelling, network, serial, parallel, USB / USB2, fire wire, optical fibre and data cables by visually inspecting, testing, analysing performance and function using software utilities, environmental measurement tools, documentation, and hand, power, electrical, electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

Sponsor/Employer Name Sponsor/Employer Signature
INFORMATION TECHNOLOGY NETWORK TECHNICIAN

6290.0 DESIGN NETWORK INFRASTRUCTURE ENVIRONMENT

GENERAL PERFORMANCE OBJECTIVE

Restore electrical and electronic components by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6290.01 Visually inspect electrical and electronic components including transistors, resistors, capacitors, diodes, circuit protection devices, jumpers, cables, switches, motors/fans, solenoids, isolators, circuit boards, memory, display/control modules, proximity and auditory alarms, diagnostic lights, sensors, lighting/illumination and fastening and mounting devices checking for moving, worn, loose and missing components, discoloration, contamination, environmental conditions according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________________________ Apprentice ____________________________ Supervisor/Trainer ____________________________

6290.02 Diagnose and troubleshoot electrical and electronic components including transistors, resistors, capacitors, diodes, circuit protection devices, jumpers, cables, switches, motors/fans, solenoids, isolators, circuit boards, memory, display/control modules, proximity and auditory alarms, diagnostic lights, sensors, lighting/illumination, and fastening and mounting devices by visually inspecting, testing, analysing performance and function checking for error indicators, power source, load and consumption, shorts, opens, grounds, resistance, voltage, amperage, continuity, connectivity, compatibility, configuration, sensory indicators, environmental conditions, physical limitations using sensory indicators, service documentation, block/schematic diagrams, software and hardware utilities, diagnostic tools, internal and external resources, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________________________ Apprentice ____________________________ Supervisor/Trainer ____________________________
6290.0 DESIGN NETWORK INFRASTRUCTURE ENVIRONMENT
– Cont’d

6290.03 **Restore electrical and electronic components** including transistors, resistors, capacitors, diodes, circuit protection devices, jumpers, cables, switches, motors/fans, solenoids, isolators, circuit boards, memory, display/control modules, proximity and auditory alarms, diagnostic lights, sensors, lighting/illumination, and fastening and mounting devices by exchanging, restoring or servicing using sensory indicators, service documentation, block/schematic diagrams, software and hardware utilities, diagnostic tools, internal and external resources, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________ Apprentice ____________ Supervisor/Trainer ____________

6290.04 **Verify restoration of electrical and electronic components** by visually inspecting, testing, analysing performance and function using sensory indicators, service documentation, block/schematic diagrams, software and hardware utilities, diagnostic tools, internal and external resources hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________ Apprentice ____________ Supervisor/Trainer ____________

Sponsor/Employer Name ___________________ Sponsor/Employer Signature ___________________
INSTALL AND CONFIGURE A NETWORK ENVIRONMENT

GENERAL PERFORMANCE OBJECTIVE

Install and configure network environment by visually inspecting, diagnosing, troubleshooting and verifying performance and function, according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6291.01 **Visually inspect the network environment** including facility environment, building blueprints, electrical system, system and communication requirements and network traffic checking for error indicators, accessibility, hardware and software requirements, environmental conditions, electrical output and connectivity (wireless, remote, DSL and high speed internet access) according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________ Apprentice ____________ Supervisor/Trainer ____________

6291.02 **Set up the network environment** including cabling, hardware and software, fastening and mounting devices, labelling, security, applications and user information by installing, configuring, deploying and migrating using sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________ Apprentice ____________ Supervisor/Trainer ____________
6291.03 Diagnose and troubleshoot the network environment including physical space, building blueprints, electrical system, system and communication requirements and network traffic by inspecting, analyzing, and validating design and specification requirements checking for error indicators, accessibility, hardware and software requirements, environmental conditions, electrical output, connectivity (wireless, remote, DSL, high speed internet access) using sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ___ Apprentice ___ Supervisor/Trainer ___

6291.04 Verify installation and configuration of network environment by visually inspecting, testing, analysing performance and function using sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ___ Apprentice ___ Supervisor/Trainer ___

Sponsor/Employer Name ___ Sponsor/Employer Signature ___
6292.0 REPAIR NETWORK ENVIRONMENT

GENERAL PERFORMANCE OBJECTIVE

Repair network environment by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6292.01 Visually inspect the network environment including facility environment, building blueprints, electrical, operating and communication systems checking for error indicators, accessibility, hardware and software requirements, environmental conditions, electrical output and connectivity (wireless, remote, DSL, high speed internet access) according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ______ Apprentice ______ Supervisor/Trainer ______

6292.02 Diagnose and troubleshoot the network environment including facility environment, building blueprints, electrical, operating and communication systems, and network traffic by inspecting, analyzing, performance and function checking for error indicators, accessibility, hardware and software requirements, environmental conditions, electrical output, connectivity (wireless, remote, DSL, high speed internet access) using sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ______ Apprentice ______ Supervisor/Trainer ______
INFORMATION TECHNOLOGY NETWORK TECHNICIAN

6292.0  REPAIR NETWORK ENVIRONMENT – Cont’d

6292.03  Repair network environment including facility environment, building blueprints, electrical, operating and communication systems and network traffic by exchanging, reconfiguring, reconditioning and servicing using sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

6292.04  Verify repair of network environment by visually inspecting, testing and analysing performance and function using sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

Sponsor/Employer Name  Sponsor/Employer Signature
IMPLEMENT DISASTER RECOVERY PROCEDURE

GENERAL PERFORMANCE OBJECTIVE

Implement disaster recovery procedure for network environment by visually inspecting, analyzing and validating design and specification requirements according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6293.01 Obtain preliminary information identifying customer requirements including existing disaster recovering plan, security, site conditions and power source checking for user issues, environmental conditions, UPS, connectivity and network traffic according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6293.02 Visually inspect installation site including physical space, electrical system, operating and communication systems, network traffic and backup resources checking for emergency components, accessibility, environmental conditions, electrical output, connectivity (wireless, remote, DSL, high speed internet access), hardware/software compatibility and backup strategy according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer
6293.0 IMPROVE DISASTER RECOVERY PROCEDURE – Cont’d

6293.03 Diagnose and troubleshoot recovery strategy including type of disaster, physical space, electrical, operating and communication systems, network traffic and backup resources by visualizing, analyzing performance and function checking for emergency components, accessibility, environmental conditions, electrical output, connectivity (wireless, remote, DSL, high speed internet access), hardware and software compatibility, backup strategy and performance inhibitors using sensory indicators, internal and external resources, diagnostic tools and utilities, hand, power, electrical and electronic service tools and equipment according to company policy and procedures, customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer

6293.04 Implement disaster recovery including communications, electrical system backup and hard drive/server backup systems by determining network traffic requirements, shutting down sequence, switching to backup equipment (if applicable), performing the repair and start up sequence, restoring system operation, reinstalling data and switching back to primary equipment using off-site/on-site data backup, documentation, security requirements, manufacturers’ manuals, internal and external resources, diagnostic tools and utilities, sensory indicators, hand, power, electrical and electronic service tools and equipment according to company policy and procedures, customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed Apprentice Supervisor/Trainer
6293.0 IMPLEMENT DISASTER RECOVERY PROCEDURE – Cont’d

6293.05 Verify disaster recovery procedure by visually inspecting, analyzing, and validating procedure using off-site / on-site data backup, documentation, security requirements, manufacturers’ manuals, internal and external resources, diagnostic tools and utilities, sensory indicators, hand, power, electrical and electronic service tools and equipment according to company policy and procedures, customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ___________________________ Apprentice ___________________________ Supervisor/Trainer ___________________________

_________________________________________ Sponsor/Employer Name

_________________________________________ Sponsor/Employer Signature
6294.0 OPTIMIZE AND MAINTAIN A NETWORKING ENVIRONMENT

GENERAL PERFORMANCE OBJECTIVE

Optimize and maintain a networking environment by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6294.01 Visually inspect the network environment including network traffic, performance and service logs and diagnostic utilities (bandwidth monitors) checking for error indicators, network traffic congestion, accessibility, hardware and software requirements, environmental conditions, electrical output, connectivity (wireless, remote, DSL, high speed internet access,) and performance inhibitors according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

6294.02 Diagnose and troubleshoot the network environment including network traffic, performance and service logs and diagnostic utilities (bandwidth monitors) by inspecting, analyzing, performance and function checking for error indicators, network traffic congestion, accessibility, hardware and software requirements, environmental conditions, electrical output, connectivity (wireless, remote, DSL, high speed internet access,) and performance inhibitors using preventative maintenance schedule, sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer
6294.0  **OPTIMIZE AND MAINTAIN A NETWORKING ENVIRONMENT** – Cont’d

6294.03  **Optimize and maintain a network environment** including reconditioning, optimizing, exchanging and servicing by cleaning, routing (cabling), replacing, defragging, patching and upgrading using preventative maintenance schedule, sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

6294.04  **Verify the performance and function of a network environment** by visually inspecting, testing and analyzing using preventative maintenance schedule, sensory indicators, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

Sponsor/Employer Name  Sponsor/Employer Signature
6295.0 IMPLEMENT NETWORKING SOLUTIONS IN A CLIENT SERVER ENVIRONMENT

GENERAL PERFORMANCE OBJECTIVE

Implement networking solutions to allow for network growth by visually inspecting, diagnosing, troubleshooting and verifying performance and function according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

SKILLS

6295.01 Visually inspect network environment to allow for network growth including topology charts and network diagrams, connectivity (wireless, remote, DSL, high speed internet access), operating and communication systems, hardware, protocols, data resources, facility environment, building blueprints, electrical system, network traffic, security rights and permissions checking for network capacity, compatibility, accessibility, documentation, hardware and software requirements according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________________________ Apprentice ____________________________ Supervisor/Trainer ____________________________

6295.02 Diagnose and troubleshoot network environment to allow for network growth including topology charts and network diagrams, connectivity (wireless, remote, DSL, high speed internet access), operating and communication systems, hardware, protocols, data resources, facility environment, building blueprints, electrical system, network traffic and security rights and permissions by visually inspecting, testing and analysing performance and function checking for network capacity, compatibility, accessibility, documentation and hardware and software requirements using, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed ____________________________ Apprentice ____________________________ Supervisor/Trainer ____________________________

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6295.0 IMPLEMENT NETWORKING SOLUTIONS IN A CLIENT SERVER ENVIRONMENT – Cont’d

6295.03 Implement network environment including topology charts and network diagrams, connectivity (wireless, remote, DSL, high speed internet access), operating and communication systems, hardware, protocols, data resources, facility environment, building blueprints, electrical system, network traffic and security rights and permissions by installing and configuring authorized solution using, building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations to allow for network growth.

Date Completed  Apprentice  Supervisor/Trainer

6295.04 Verify networking solution allowing for network growth including topology charts and network diagrams, connectivity (wireless, remote, DSL, high speed internet access), operating and communication systems, hardware, protocols, data resources, facility environment, building blueprints, electrical system, network traffic and security rights and permissions by visually inspecting, testing, analysing performance and function using building schematic drawings, topology charts and network diagrams, documentation, hardware and software diagnostic utilities, internal and external resources, security requirements, licensing specifications, hand, power, electrical and electronic service tools and equipment according to customer satisfaction, industry standards, manufacturers’ recommendations, specifications, safety requirements and government regulations.

Date Completed  Apprentice  Supervisor/Trainer

Sponsor/Employer Name  Sponsor/Employer Signature
# INFORMATION TECHNOLOGY NETWORK TECHNICIAN

## APPRENTICE RECORD

### APPRENTICE NAME (Print):

### SPONSOR/EMPLOYER INFORMATION

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### SUMMARY OF TRAINING

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Date Completed: 
Apprentice: 
Supervisor/Trainer: 

Ontario College of Trades ©
### APPRENTICE COMPLETION FORM

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<tr>
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<tr>
<td>Signature</td>
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<td>Social Insurance Number</td>
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Skill Sets when completed should be signed by the Supervisor/Trainer and presented with this completion form to your local Apprenticeship Client Services Office. Any supporting documentation should also be attached.

- **In-school Completed (Proof to be Provided)**
  - Yes ( )
  - No ( )
  - Not applicable ( )

- **Hours completed as Per Contract:**
  - Yes ( )
  - No ( )
  - Not applicable ( )

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<td>Signature of Signing Authority</td>
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You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario’s apprenticeship training system. For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.