# **Broadband Technician**



Youth Apprenticeship

# **BROADBAND TECHNICIAN**

The Broadband Technician assists with on-site installations, troubleshooting, repairs, and maintenance of telecommunications products and equipment. Technicians have direct, face-to-face contact with customers. Services include, but are not limited to, Telephony, Video/CATV/DBS, Internet, Wi-Fi, and/or high-speed networks.

Length of Apprenticeship: One year

#### **OCCUPATIONAL COMPETENCIES**

Youth apprentices must complete **a total of 9** competencies per year. **Eight** must be from the list below. If necessary, employers can substitute up to **1** competency per year with another occupationally appropriate skill. That skill should be added to the competency list for assessment. Note that where necessary, skills can be simulated.

## **Competencies**

- 1. Evaluate work order
- 2. Install and configure customer infrastructure
- 3. Verify completion of installation
- 4. Evaluate repair work order
- 5. Diagnose service problem
- 6. Resolve service problem
- 7. Install or replace ONT UPS
- 8. Educate customers on product use
- 9. Maintain information and system security

# **REGISTERED APPRENTICESHIP BRIDGING OPPORTUNITIES**

The following Registered Apprenticeship is available in this area:

• Broadband Service Technician

#### POST-SECONDARY PATHWAY OPPORTUNITIES

There are several post-secondary pathway opportunities in this area. The following is a partial list.

- Broadband Internet Technician Technical Diploma
- Broadband Technologies Technical Diploma

# WISCONSIN—YOUTH APPRENTICESHIP

# **Broadband Technician**

Youth Apprenticeship

# ON-THE-JOB LEARNING PERFORMANCE STANDARDS GUIDE

(TO BE COMPLETED BY YA CONSORTIUM)

# YOUTH APPRENTICE INFORMATION

TOOTH APPRENTICE IN	CINIMITION					
Youth Apprentice Name						
YA Coordinator YA Consortium						
School District	Hig	gh School Graduation Date				
REQUIREMENTS						
Level One Requirements  Youth apprentices must complete ALL the items listed below. Check completed areas.  Competency checklist Employability Skills checklist (in this OJL Guide) or the DPI Employability Skills Certificate Related instruction equal to 1 high school credit or at least 3 college credits Minimum of 450 work hours  HOURS						
Record the hours the youth app	rentice worked.					
Total Hours Employed	Total Hours Employed Company Name Telephone Number					

# **RELATED INSTRUCTION**

YEAR 1: Indicate which related instruction courses the youth apprentice completed.

Dual Credit	Course Number and Title	Credits	Instruction Provider

## **SIGNATURES**

The On-the-Job Learning Performance Standards Guide includes a list of competencies youth apprentices learn through mentoring and training at the worksite.

Instructions for the Worksite Employers/Mentors and School-Based or YA coordinators: This document should be reviewed with the employer/mentor, school-based or YA coordinator on a regular basis with the youth apprentice to record progress and plan future steps to ensure completion of the required competencies. Mentors, school-based/YA coordinator, and the apprentice sign below.

Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed
School-Based and/or YA Coordinator Signature	School-Based and/or YA Coordinator Signature
School-Based and/or YA Coordinator	School-Based and/or YA Coordinator
School District or Organization	School District or Organization
Date Signed	Date Signed
Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

# **EMPLOYABILITY SKILLS (TO BE COMPLETED BY YA EMPLOYER/MENTOR)**

Youth apprentices must demonstrate key employability skills.

The DWD YA program employability skills requirement may be attained and demonstrated through two processes. (See options listed below.) Employability skills must be completed for every year a student is in the program. The DPI Employability Skills Certificate may be counted as meeting one of those two years, provided the certificate is earned in the same year the student is enrolled in youth apprenticeship or they can complete the YA Employability Skills in the OJL. The Employability Skills Certificate must be obtained through the DPI.

1. If a student has successfully completed a Wisconsin Department of Public Instruction (DPI)

State-Certified Cooperative Education, Co-Op Employability Skill certification then they have met

1	Working to Meet Expectations: Needs improvement: requires much assistance and supervision:
	behavior
2	Meets Expectations: Meets entry-level criteria; requires some supervision; often displays this
	displays this behavior
3	Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently
2	. Completed and rated "Employability Skills" through this YA OJL guide as described below.
	☐ Earned Wisconsin Employability Skills Certificate (checked if applicable) or,
	Employability Skill Certificate must be maintained on file with their YA regional consortium.

The following skills are required of all youth apprentices.

rarely displays this behavior

<b>Employability Skills</b>		Rating	
Competency and Rating Criteria	Minimum Rating of 2 for EAC Check Rating		
	1	2	3
<ol> <li>Develops positive work relationships with others.         Examples of qualities and habits that the employee might exhibit include         Interacts with others with respect and in a non-judgmental manner         Responds to others in an appropriate and non-offensive manner         Helps co-workers and peers accomplish tasks or goals         Applies problem-solving strategies to improve relations with others         When managing others, shows traits such as compassion, listening, coaching, team development, and appreciation     </li> </ol>			

	Employability Skills		Rating	
		Minimun	n Rating of 2	2 for EACH
	Competency and Rating Criteria	(	Check Ratin	ıg
		1	2	3
2.	Communicates effectively with others  Examples of qualities and habits that the employee might exhibit include  • Adjusts the communication approach for the target audience, purpose, and situation to maximize impact  • Organizes messages/information in a logical and helpful manner  • Speaks clearly and writes legibly  • Models behaviors to show active listening  • Applies what was read to actual practice  • Asks appropriate questions for clarity			
3.	<ul> <li>Collaborates with others</li> <li>Examples of qualities and habits that the employee might exhibit include</li> <li>Works effectively in teams with people of diverse backgrounds regardless of sex, race, ethnicity, nationality, sexuality, religion, political views, and abilities</li> <li>Shares responsibility for collaborative work and decision making</li> <li>Uses the problem-solving process to work through differences of opinion in a constructive manner to achieve a reasonable compromise</li> <li>Avoids contributing to an unproductive group conflict</li> <li>Shares information and carries out responsibilities in a timely manner</li> </ul>			
4.	<ul> <li>Maintains composure under pressure</li> <li>Examples of qualities and habits that the employee might exhibit include</li> <li>Uses critical thinking to determine the best options or outcomes when faced with a challenging situation</li> <li>Carries out assigned duties while under pressure</li> <li>Acts in a respectful, professional, and non-offensive manner while under pressure</li> <li>Applies stress management techniques to cope under pressure</li> </ul>			
5.	<ul> <li>Demonstrates integrity</li> <li>Examples of qualities and habits that the employee might exhibit include</li> <li>Carries out responsibilities in an ethical, legal and confidential manner</li> <li>Responds to situations in a timely manner</li> <li>Takes personal responsibility to correct problems</li> <li>Models behaviors that demonstrate self-discipline, reliability, and dependability</li> </ul>			

	Employability Skills		Rating	
		Minimun	n Rating of	2 for EACH
	Competency and Rating Criteria		Check Ratir	ıg 📗
	, , ,	1	2	3
6.	<ul> <li>Performs quality work</li> <li>Examples of qualities and habits that the employee might exhibit include</li> <li>Carries out written and verbal directions accurately</li> <li>Completes work efficiently and effectively</li> <li>Performs calculations accurately</li> <li>Conserves resources, supplies, and materials to minimize costs and environmental impact</li> <li>Uses equipment, technology, and work strategies to improve workflow</li> <li>Applies problem-solving strategies to improve productivity</li> <li>Adheres to worksite regulations and practices</li> <li>Maintains an organized work area</li> </ul>			
7.	Provides quality goods or services (internal and external)  Examples of qualities and habits that the employee might exhibit include  Shows support for the organizational goals and principles by own personal actions  Displays a respectful and professional image to customers  Displays an enthusiastic attitude and desire to take care of customer needs  Seeks out ways to increase customer satisfaction  Produces goods to workplace specifications			
8.	<ul> <li>Shows initiative and self-direction         Examples of qualities and habits that the employee might exhibit include     </li> <li>Prioritizes and carries out responsibilities without being told</li> <li>Responds with enthusiasm and flexibility to handle tasks that need immediate attention</li> <li>Reflects on any unsatisfactory outcome as an opportunity to learn</li> <li>Improves personal performance by doing something different or differently</li> <li>Analyzes how own actions impact the overall organization</li> <li>Supports own action with sound reasoning and principles</li> <li>Balances personal activities to minimize interference with work responsibilities</li> </ul>			

Employability Skills	i <sub>.</sub>	Rating	
	Minimun	Minimum Rating of 2 for EACH	
Competency and Rating Criteria	(	Check Ratin	ıg
	1	2	3
<ul> <li>9. Adapts to change Examples of qualities and habits that the employee might exhibit include</li> <li>Shows flexibility and willingness to learn new skills for various job roles</li> <li>Uses problem-solving and critical-thinking skills to cope with changing circumstances</li> <li>Modifies own work behavior based on feedback, unsatisfactory outcomes, efficiency, and effectiveness</li> <li>Displays a "can do" attitude</li> </ul>			
<ul> <li>10. Demonstrates safety and security regulations and practices  Examples of qualities and habits that the employee might exhibit include</li> <li>Follows personal safety requirements</li> <li>Maintains a safe work environment</li> <li>Demonstrates professional role in an emergency</li> <li>Follows security procedures</li> <li>Maintains confidentiality</li> </ul>			
<ul> <li>11. Applies job-related technology, information, and media Examples of qualities and habits that the employee might exhibit include</li> <li>Applies technology effectively in the workplace</li> <li>Assesses and evaluates information on the job</li> <li>Assesses training manuals, website, and other media related to the job</li> </ul>			
<ul> <li>12. Fulfills training or certification requirements for employment Examples of this requirement may include</li> <li>Participation in required career-related training and/or educational programs</li> <li>Passing certification tests to qualify for licensure and/or certification</li> <li>Participation in company training or orientation</li> </ul>			
<ul> <li>13. Sets personal goals for improvement         Examples of this requirement may include         <ul> <li>Setting goals that are specific and measurable</li> <li>Setting work-related goals that align with the organization's mission</li> <li>Identifying strategies to reach goals</li> <li>Reflecting on goal progress to regularly evaluate and modify goals</li> </ul> </li> </ul>			

# **OCCUPATIONAL COMPETENCIES**

# (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

Youth apprentices must complete **a total of 9** competencies per year. **Eight** must be from the list below. If necessary, employers can substitute up to **1** competency per year with another occupationally appropriate skill. That skill should be added to the competency list for assessment. Note that where necessary, skills can be simulated.

#### **Rating Scale**

- 3: Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior
- 2: Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1: Needs improvement | Requires much assistance and supervision | Rarely displays this behavior

If any competencies are rated "1" on the final performance review checklist that is submitted to WI DWD it is considered a failed checklist.

Occupational Competencies		Rating	
	Minimur	n Rating of 2	for EACH
Competency and Rating Criteria		Check Ratin	g
	1	2	3
<ul> <li>Evaluate work order</li> <li>identify the customer</li> <li>identify services ordered</li> <li>verify the location of the facility</li> <li>review equipment needs</li> <li>follow company procedure regarding installation</li> <li>read network map</li> <li>get connectivity to location</li> <li>install cross connect</li> </ul>			
<ul> <li>assist splicing customer facility</li> <li>clean fiber optic connectors</li> <li>install demarcation point (DMARC)</li> <li>install a Universal Power Supply (UPS)</li> <li>test connectivity to the premise</li> </ul>			
<ul> <li>Install and configure Customer Infrastructure</li> <li>install jack and wiring</li> <li>certifies inside wiring</li> <li>install Wi-Fi gateway routers and modems</li> <li>optimizes Wi-Fi location</li> <li>install ethernet switches</li> <li>install VoIP devices</li> <li>install Set Top Boxes (STB) and remotes</li> <li>install Wi-Fi extenders</li> <li>install mesh network</li> <li>install ethernet overpower, MOCA, or HPNA</li> </ul>			

	Occupational Competencies		Rating	
		Minimur	n Rating of 2	for EACH
	Competency and Rating Criteria		Check Ratin	g
		1	2	3
3.	<ul> <li>Verify completion of installation</li> <li>hook up customer equipment</li> <li>test broadband, TV, voice services</li> <li>install IoT (Internet of Things) devices per company procedures</li> <li>verify services are working</li> <li>educate customer on products installed</li> </ul>			
4.	<ul> <li>Evaluate repair work order</li> <li>identify the customer</li> <li>identify the issue</li> <li>verify the location of the facility</li> <li>review equipment needs</li> <li>follow company procedure regarding trouble shooting</li> </ul>			
5.	<ul> <li>Diagnose service problem</li> <li>identify proper tests equipment needed to perform tests</li> <li>perform the tests</li> <li>assess tests result</li> <li>determine location of problem (inside/outside)</li> <li>communicate with customer if needed</li> </ul>			
6.	<ul> <li>Resolve Service Problem</li> <li>repair or replace equipment</li> <li>repair or replace facilities</li> <li>optimizes network configuration wired and wireless</li> <li>confirm service is operating and meets customer satisfaction</li> <li>communicate resolution to customer</li> </ul>			
7.	<ul> <li>Install or replace ONT UPS</li> <li>demonstrate proper installation</li> <li>demonstrate proper replacement</li> </ul>			
8.	<ul> <li>Educate customers on product use</li> <li>demonstrate products to customers if needed</li> <li>refer to documentation or company literature</li> </ul>			
9.	<ul> <li>Maintain information and system security</li> <li>identify the impact of sensitive data exposure</li> <li>use virus and malware protection tool</li> <li>use strong passwords</li> <li>monitor security of company and personal data</li> </ul>			

Occupational Competencies		Rating	
	Minimun	n Rating of 2	for EACH
Competency and Rating Criteria		Check Ratin	g
	1	2	3
Competency Substitute (if you replaced a competency above, note the competency and rating)			
Comments:			



# **Post-Program Completion Survey**

Youth Apprenticeship

# YA POST-PROGRAM COMPLETION SURVEY: EMPLOYER FEEDBACK

Employers complete the following information. YA Coordinators will enter this into the Post-Program Completion Survey.

YA Employer Post-Program Completion Questions				
Will you offer or have you offered the Youth Apprentice a continuing position with your company?	□Yes □No			
If continuing position offered to youth apprentice, did they accept?	□Yes □No			
If yes, please answer the questions below:				
Was the offer for full time or part time work?	☐Full-time ☐Part-time			
Title of the position offered:				
What is the wage of the continuing employment offer?				
If applicable, will the youth apprentice advance to a Registered Apprenticeship?				

## YA POST-PROGRAM COMPLETION SURVEY: COMPLETED BY YA CONSORTIUM

The <u>Post-Program Completion Survey</u> form is to be provided to each student completing the Youth Apprenticeship program to capture information on the student's plans after leaving the program. This **form should be completed by the Youth Apprenticeship Coordinator** to capture information from all high school seniors and their employers after successful completion of the Youth Apprenticeship Program.

The form should be completed during the final meeting between the student, mentor, and Youth Apprenticeship Coordinator, when the final checklist or On-the-Job Learning (OJL) Guide is filled out and signed. Information captured on this form must be entered online using the Youth Apprenticeship Online Data Application (YODA) System.

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