# **COMMUNICATIONS TECHNICIAN SERIES**

		Occ.	Work	Prob.	Effective	Last
Code No.	Class Title	Area	Area	Period	Date	Action
3901	Communications Technician I	02	029	6 mo.	03/15/07	Rev.
3902	Communications Technician II	02	029	6 mo.	03/15/07	Rev.
3903	Communications Technician III	02	029	6 mo.	03/15/07	Rev.

**Promotional Line: 48** 

## **Series Narrative**

Employees in this series are technicians who install, operate and maintain electronic equipment and circuits that are a part of the communication networks. Voice networks provide normal telephone services and special feature (such as call forwarding, three-way calling or voice mail systems). Data networks provide the communication of data within local area networks or between central computer systems and remote data-input terminals. Communication Technicians work on segments of overall network-circuits that connect an individual user's equipment to central equipment. Technology has progressed to where Technicians work in both areas; voice and data communications, equipment and circuitry, but there may be positions that work in one or the other.

## Communications Technicians typically:

- -- install and/or maintain electronic communication equipment (such as telephone sets, line status indicators, or modems)
- -- troubleshoot service malfunctions or equipment breakdowns (such as the loss of signal, open facilities, or defective equipment) by evaluating, coordinating, and resolving the telecommunications problems
- -- process customer orders for the installation of initial voice, video and/or data communication services as well as service orders for the maintenance and repair of communications equipment and circuits (such as scheduling services, making cable assignments, and completing related records)
- -- install cabling or other equipment in accordance with accepted industry standards
- -- maintain network documentation and equipment specifications
- -- maintain and modify operating procedures and standards for documentation

## DESCRIPTIONS OF LEVELS OF WORK

## Level I: Communications Technician I 3901

Employees at this level are entry level technicians who learn and perform elementary data, and/or voice communications circuits troubleshooting and network documentation within clearly defined procedures and standards. They work under the direct supervision of a designated supervisor.

## A Communications Technician I typically –

1. learns basic telecommunications technology and observes its application

- 2. assists in troubleshooting and repairing breakdowns or malfunctions in isolated pieces of circuits according to established procedures
- 3. assists in testing and performing emergency network back-up procedures
- 4. assists in labeling equipment and maintaining network documentation and equipment specifications
- 5. assists in the cabling and installation of new communication lines and terminals according to established procedures
- 6. performs other related duties as assigned

## **Level II: Communications Technician II**

3902

Employees at this level perform communication sub-network troubleshooting and documentation at an intermediate level of skill and are familiar with the circuitry and equipment of the overall network. They work under general supervision of a designated supervisor.

A Communications Technician II typically -

- 1. troubleshoots and repairs breakdowns or malfunctions in communication circuits, including the full range of devices utilized for a complete circuit, by identifying, isolating, and resolving problems as they arise
- 2. tests and performs established network back-up procedures when there are no equipment or line failures
- 3. makes the assignment of communication media and equipment to specific services
- 4. labels and routes equipment and cables and maintains network documentation, configuration diagrams, and specifications as required
- 5. installs new communication equipment and lines by interacting with vendors and checking the new service for proper functioning
- 6. maintains communications equipment (such as modems, telephone sets, etc.)
- 7. installs, troubleshoots, and repairs network cabling and other wiring and cables, including appropriate termination and splicing of cables (copper and/or fiber optics)
- 8. makes cable assignments; updates circuit information and cable inventory
- 9. may receive direction and training in advanced technology
- 10. may assist in training lower level technicians
- 11. performs other related duties as assigned

# Level III: Communications Technician III 3903

Employees at this level perform complex communications technical support. They install, maintain, test and analyze communications network equipment malfunctions or failure. Employees are familiar with circuitry and equipment of the overall network and may provide expertise in a special area. They work under general supervision of a designated supervisor.

#### A Communications Technician III typically –

- 1. coordinates projects as assigned to ensure installation work is on schedule and meets required campus standards
- 2. installs, troubleshoots, and repairs station equipment, wiring, cabling, network interfaces and distribution frames for communication networks
- 3. installs and maintains network equipment for video conferencing, voice or data transmission
- 4. keeps records of time and material costs associated with installations, projects and repairs
- 5. may perform work on campus alarm system circuitry (such as fire, intrusion, moisture, temperature, etc.)
- 6. performs fiber optics splicing (mechanical, fusion), terminating and testing using light source/power meters and OTDR
- 7. operates, maintains, and repairs peripheral communications systems
- 8. verifies and tests communications work of other vendors for proper functioning
- 9. maintains inventory of assigned materials
- 10. may assist in training lower level technicians
- 11. performs other related duties as assigned

### MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:

#### **Level I: Communications Technician I**

3901

#### CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. Any one or any combination of the following that totals one academic year:
  - (a) college/vocational/technical training in telecommunications, electronics engineering/technology, data processing, or a related technical field
  - (b) work experience in the installation, maintenance, and/or repair of communications, electronic, and/or data processing equipment
- 2. As required by the employing institution, possession of a valid driver's license as required by the State of Illinois for the type of motor vehicle(s) to be operated by the incumbent

## PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

- 1. basic knowledge of the telecommunications or electronic field
- 2. elementary knowledge of computer or telecommunications hardware and functions
- 3. basic written and verbal communications skills
- 4. mechanical and analytical ability for problem solving
- 5. ability to lift (transport) heavy materials/objects

## **Level II: Communications Technician II**

3902

#### CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. Any one or any combination of the following preparation that totals two academic years:
  - (a) college/vocational/technical training in telecommunications, electronics engineering/technology, data processing, or a related technical field
  - (b) work experience in communications, comparable to that gained as a Communications Technician I
- 2. As required by the employing institution, possession of a valid driver's license as required by the State of Illinois for the type of motor vehicle(s) to be operated by the incumbent

## PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

- 1. basic knowledge of communications technology
- 2. applied knowledge of the operation of electronic test equipment
- 3. written and verbal communications skills
- 4. mechanical and analytical ability for problem solving
- 5. ability to lift (transport) heavy materials/objects

## Level III: Communications Technician III 3903

## CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. Any one or any combination of the following preparation that totals two academic years:
  - (a) college/vocational/technical training in telecommunications, electronics engineering/technology, data processing, or a related technical field
  - (b) work experience in communications, comparable to that gained as a Communications Technician I
- 2. Twenty-four months of <u>additional</u> work experience in communications, comparable to that gained as Communications Technician II
- 3. As required by the employing institution, possession of a valid driver's license as required by the State of Illinois for the type of motor vehicle(s) to be operated by the incumbent.

#### PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

- 1. working knowledge of communications technology
- 2. skill in using testing equipment used in maintaining circuit networks
- 3. ability to read and follow schematics and diagrams
- 4. ability to organize work segments with others