

TELECOMMUNICATIONS TECHNICIAN PROGRAM

RELATED INSTRUCTION

- A. Each apprentice shall be required to complete four years of related instruction away from the job for a minimum of 160 hours per year. The minimum related course of study shall be that as listed below.
- B. Topics to be studied (completed) as part of the required NJATC curriculum shall include, but not be limited to:

FIRST YEAR-160 HOURS MIN.

BLUEPRINT READING
COMMUNICATION SKILLS
ELECTRICAL THEORY, DC
ELECTRICAL COMPONENTS
ELECTRICAL TEST EQUIPMENT
FIBER OPTICS
INDUSTRY ORIENTATION
JOB INFORMATION
MATHEMATICS
NATIONAL ELECTRICAL CODE
OSHA/SAFETY AWARENESS
PREMISES CABLING
SAFETY & HEALTH AWARENESS
STRUCTURED WIRING SYSTEMS
EIA/TIA STANDARDS
TOOL IDENTIFICATION
DATA TRANSMISSION FUNDAMENTALS

THIRD YEAR-160 HOURS MIN.

BUILDING AUTOMATION SYSTEMS
CCTV
CUSTOMER RELATIONS
ELECTRONIC TEST EQUIPMENT
ELECTRONIC THEORY
ELECTRONIC TROUBLESHOOTING
ENTERTAINMENT SYSTEMS
ENVIRONMENTAL SYSTEMS
INDUSTRY ORIENTATION
JOB INFORMATION
LIFE SAFETY SYSTEMS
NURSE CALL SYSTEMS
PROTOCOLS
RFSYSTEMS
SOUND SYSTEMS
SYSTEMS ANALYSIS, REPAIR AND CERT.
TELEVISION SYSTEMS
VIDEO DISTRIBUTION
WIDE AREA NETWORKS

SECOND YEAR-160 HOURS MIN.

DATA SYSTEMS
DIGITAL ELECTRONIC CIRCUITRY
ELECTRICAL THEORY, AC
ELECTRONIC TEST EQUIPMENT
FIRE ALARM SYSTEMS
GROUNDING & BONDING
INDUSTRY ORIENTATION
JOB INFORMATION
LOCAL AREA NETWORKS
NATIONAL ELECTRICAL CODE
PAGING SYSTEMS
POWER QUALITY
PROTOCOLS
SECURITY & ACCESS CONTROL
TELEPHONY

FOURTH YEAR-160 HOURS MIN.

40 HOURS CORE
CCTV – Adv.
JOB INFORMATION
LOCAL AREA NETWORKS – Adv.
ORIENTATION
SOUND REINFORCEMENT
120 HOURS ADVANCED
FIRE ALARM
I/T POWER QUALITY
PAGING & VOICE EVACUATION
SECURITY SYSTEMS
BUILDING AUTOMATION
NURSE CALL SYSTEMS
RF COMMUNICATIONS
SEMICONDUCTOR
SOUND REINFORCEMENT
OTHER NJATC APPROVED COURSES
LOCALLY RECOGNIZED CERTIFICATION COURSES
INDUSTRY RECOGNIZED CERTIFICATION COURSES

- C. The time spent in related instruction shall be in addition to the required 8000 hours of on-the-job@ training, and shall not be considered hours of work.

- D. When the related instruction is given in a classroom, the Committee shall secure competent instructors whose knowledge, experience and ability to teach shall be carefully examined. When possible, the instructor shall take such teacher training courses as are available from the NJATC or others.
- E. The Committee shall secure course material made available through the NJATC and other material and equipment as deemed necessary by the AJATC.
- F. Periodic examinations shall be administered and properly supervised with the results reported to the Committee so that the apprentice=s progress may be evaluated and corrective measures applied where necessary.

WAGES

Apprentices shall be employed on a stipulated hourly wage basis, as provided in the CBA. The schedule of apprentice wages shall be stated in percent (%) of the TeleCommunications Technician rate and provide for six periods as listed below.

Increases shall be subject to satisfactory progress on the job and in related instruction. The apprentice=s wages are provided in the local labor agreement under which the apprentice is employed. Contact the Committee for information if required.

The percentage for hourly wages stated in the CBA shall be:

Period	Percent of Technician Rate	+	Minimum	+	Related Training Accumulative OJT Hours
1	_____	+	0	+	N/A
2	_____	+	1000	+	Satisfactory Progress
3	_____	+	2000	+	Satisfactory Progress
4	_____	+	3500	+	1 st Yr. School Completed
5	_____	+	5000	+	2 nd Yr. School Completed
6	_____	+	6500	+	3 rd Yr. School Completed
Completion	100	+	8000	+	4 th Yr. School Completed

SCHEDULE OF WORK EXPERIENCE

In order to acquire the necessary skills of the trade in its various categories, the TeleCommunications Technician Apprentice shall (as near as possible) be provided with employment in the following categories and amounts:

WORK PROCESS	APPROX. HOURS OJT
PROJECT LAYOUT AND PLANNING	500
Reading and interpreting blueprints and specifications; Job site coordination; Layout telecommunication cabling systems	
PROJECT UNDERGROUND INSTALLATIONS	200
Trenching and ditch digging; Direct Burial; Installing telecommunication grounding systems	

WORK PROCESS**APPROX. HOURS OJT**

ROUTING CABLE Fastening and support; Protective sleeves and nipples	300
TESTING, CERTIFYING & TROUBLESHOOTING LAN SYSTEMS Checking circuit continuity; Identifying faults; Certifying system operation; System repair; Ground verification	500
SECURITY SYSTEM INSTALLATION Blueprint and specification interpretation; Layout; Box and circuit installation; Terminations; Testing	700
INSTALLING COMMUNICATION AND SOUND SYSTEMS Blueprint and specification interpretation; Layout; Installing telecommunication panels and network devices; Circuit installation; Terminations and testing	600
INSTALLING NETWORKING TELECOMMUNICATION WIRE AND CABLES Installing and networking between buildings; Wiring large and small campus systems; Installing backbones; Installing horizontals; Installing crossconnects and interconnects	1200
TERMINATING WIRES AND CABLES Bundled cable; Shielded cable; Unshielded cable; Optical fiber cable; Twisted pair; Coaxial cable	1000
SPLICING WIRES AND CABLES Optical fiber cable; Shielded and unshielded twisted pair; Coaxial cable	300
INSTALLING CCTV AND VIDEO DISTRIBUTION SYSTEMS Installing cameras and lenses; Installing DVRs; Installing monitors; Installing video switching equipment; System layout; Terminations and testing; Installing video amplifiers	600
SYSTEM COMMISSIONING Local Area Network (switches and routers); Fire alarms systems; CCTV systems; Security systems; Nurse Call systems; Access control systems; Building automation systems; Sound systems	500
PROJECT SERVICE AND TROUBLESHOOTING Testing, analysis and repair of video, voice and data; Installations: electronic devices, LAN circuits and telecommunication devices	1000
MATERIAL HANDLING AND PRE-FABRICATION Material/equipment awareness; Fabricating for field installation;	200
SAFETY AWARENESS & OTHER SPECIALIZED AREAS Safety; Sub-Systems: Communications, Entertainment, Environmental Control, Life Safety	400
TOTAL MINIMUM HOURS OF OJT	8,000

PROBATIONARY PERIOD



APPROPRIATE NUMBER OF HOURS (2000 RECOMMENDED) MUST BE ENTERED IN THE FOLLOWING PARAGRAPH BY THE LOCAL JATC.

The first _____ hours of OJT and satisfactory performance in related classroom training during such time shall constitute the probationary period. Hours accumulated within the probationary period shall apply toward registration completion requirements. During this period the apprenticeship agreement may be canceled by either party without the formality of a hearing. The Registration Agency shall be notified of such cancellations. Furthermore, the Registration Agency shall be notified of any extension of the probationary period (documenting action taken to address the issue(s) involved) in lieu of terminating the apprenticeship agreement.

During the probationary period, the JATC shall make a thorough review of the apprentice's ability and development. The JATC shall solicit information from the Subcommittee, if one exists, concerning the performance of each TeleCommunications Technician apprentice. Advanced standing for previous training or experience does not reduce the probationary period.

Applicants awarded advanced standing at the time of registration shall have their demonstrated skill, knowledge and overall performance evaluated during the probationary period. Adjustments, to the assigned period of apprenticeship and/ or level of related classroom training may be made during the probationary period, following appropriate reviews and evaluation by the JATC. Such reviews and determinations shall be properly documented and applied equally to all apprentices.

Prior to the end of the probationary period, action must be taken on each probationary apprentice to end the probation, extend the probation, or cancel the apprenticeship agreement. All interested parties shall be notified of such action.