

# TOMPKINS COUNTY CIVIL SERVICE EXAMINATION

Inclusion Through Diversity



## OPEN TO THE PUBLIC

Tompkins County Department of Human Resources Office  
125 E. Court Street  
Ithaca, NY 14850  
(607) 274-5526

Tompkins County is an Equal Opportunity/Affirmative Action employer. Minorities and women are encouraged to apply

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**TITLE:** Systems Analyst/Technician

**EXAM NO:** 65873

**SALARY:** \$65,000 per year base.

**EXAM DATE:** 12/01/18

**ISSUE DATE:** 10/16/18

**THE FINAL DATE TO FILE APPLICATIONS:** 10/31/18

**DATE THAT THIS ANNOUNCEMENT SHOULD BE REMOVED FROM POSTING:** 12/02/18

**RESIDENCY WAIVED**

THE USE OF A QUIET HAND HELD CALCULATOR IS ALLOWED FOR THIS EXAMINATION.

**LOCATION OF POSITIONS/VACANCIES:**

There is currently one vacancy in the title of Systems Analyst/Technician located at Groton Central School. The eligible list resulting from this open competitive examination may be used to fill any full-time, part-time, or temporary vacancies that may occur during the life of the eligible list.

**MINIMUM QUALIFICATIONS:**

(a) Graduation from a regionally accredited or New York State registered four year college or university with a Bachelors Degree in Computer Science, Electrical or Computer Engineering, Communications Technology or a related field **AND** three years of full-time paid (or the equivalent part-time and/or volunteer) experience in systems analysis and the maintenance of electronic data processing equipment and communication systems; **OR**

(b) Graduation from a regionally accredited or New York State registered two year college with an Associates Degree in Computer Science, Electrical or Computer Engineering, Communications Technology or a related field **AND** five years of full-time paid (or the equivalent part-time and/or volunteer) experience in systems analysis and the maintenance of electronic data processing equipment and communication systems; **OR**

(c) Graduation from high school or possession of a high school equivalency diploma **AND** seven years of full-time paid (or the equivalent part-time and/or volunteer) experience in systems analysis and the maintenance of electronic data processing equipment and communication systems; **OR**;

(d) Any equivalent combination of training and experience as described in (a), (b) and (c) above.

**NOTE:** Degrees in word processing, or spreadsheets does not qualify in (a) and (b).

## **SPECIAL REQUIREMENTS:**

Must possess of a valid New York State motor vehicle operators license or otherwise demonstrate the ability to meet the transportation requirements of the job.

## **DISTINGUISHING FEATURES OF THE CLASS:**

This is a technical position responsible for developing, maintaining and recommending work involving telecommunications, networking, system integration and maintenance of related hardware and software. The incumbent is responsible for the adaptation of micro-computers and telecommunications systems to department and user needs. Working with various departments as needed, the incumbent works from problem definition to implementation and support for the system designed. This includes the supervision, coordination, planning, and implementation of work involving telecommunications (including new telephone systems, new phone installation on existing systems, and maintenance of the existing systems). This position works under the general direction of the Network Systems Administrator or Telecommunications Programming Administrator. Considerable leeway is allowed for the exercise of independent judgment when planning and carrying out the work methods and procedures with commensurate responsibility for technical results. This position requires the ability to work with a high degree of autonomy making daily independent judgments in coordinating major projects. The incumbent will be called upon to supervise work projects, work groups, and to provide technical supervision to other County departmental staff. The incumbent will perform other related duties as required.

## **TYPICAL WORK ACTIVITIES:**

### **Telecommunications**

- Principal County focal point for telecommunications circuit providers, long distance and regional carriers to resolve problems regarding the equipment, lines, service options and maintenance;
- Responsible for the operation of the County's numerous telephone systems;
- Program phone switching equipment for new telephones and features, and for changes of existing telephones and features;
- Insures customer satisfaction, provides feedback to customers on status of requests and follow-up with customers to provide increasing standards of service. Incorporate results into service approach;
- Receive, evaluate, prioritize, schedule work, and take action on customer requests for repair, installation or modification of telephone equipment.
- Maintain telephone systems (including hardware, software, etc.);
- Installs, tests and evaluates delivered telecommunication material Coordinates the operation of telecommunications hardware and software;
- Conduct in-depth research to develop maintenance procedures;
- Maintain the telephone systems with minimal disruption in service;
- Develop tests to assure system reliability, analyzes data, and develops procedures to increase fault tolerance;
- Integrate telephones, computers and networks, i.e.: voice mail, modems, DSU's, CSU's, network based phone & video conferencing, T1's & fractional T1's;
- Coordinate activities with other County Agencies to assure timely project completion;
- Provide help desk support for telecommunications, including responding to emergency calls for hardware and software;
- Identify telecommunications hardware and software to support customer requests;
- Research and develop cost estimates for telecommunications equipment, software and installation for departmental budgetary analysis and training;
- Train customers on telecommunications equipment, including features, usage, and system capabilities;
- Monitor and maintain inventory of spare telephones and related peripheral equipment;
- Research rapidly changing technology using telecommunications trade journals and other forms of media to provide suggestions and input for future needs.
- Determine requirement for tools, spares, support equipment and wire necessary to support telecommunications equipment;
- Prepare technical bid specifications and proposals;
- Analyze and evaluate bid or proposal responses resulting in recommendations for hardware, software, carrier and other services;
- Provide technical assistance with drafting, analyzing and negotiating contracts for equipment, systems and professional services;
- Collect, analyze and distribute costs related to the monthly usage of County telephone systems.

## **Computer Systems:**

- Manage file servers, print servers, network peripherals and server based software to assure system functionality, compatibility, security, integrity and effective resource sharing;
- Install hardware, software & network connections;
- Insures customer satisfaction, provides feedback to customers on status of request and follow-up with customers to provide increasing standards of service and incorporates the results into a service approach;
- Develop, maintain and recommend computer hardware and software systems;
- Debug and assures compliance of all systems with users needs;
- Integrate telephones, computers and network equipment;
- Conduct in-depth research as required to develop and maintain the computer systems with minimal disruption in service;
- Communicate with other County Agencies as part of hardware/software support and coordination;
- Provide help desk support for microcomputer, software, and networking issues;
- Analyze and evaluate bid or proposal responses resulting in recommendations for hardware, software;
- Provide formal and informal customer training on various microcomputer and network hardware and software;
- Determine customer requirement, analyze data, plan, develop, test, and refine custom computer programs as required using diverse programming languages and environments;
- Receive, evaluate, prioritize, schedule work, and take action on customer requests for new computer hardware/ software or changes to existing hardware & software.
- Ensure repairs are completed in a timely manner;
- Manage the installation, testing and evaluation of delivered materials;
- Research rapidly changing technology using computer trade journals and other forms of media to provide suggestions and input for future needs maintain knowledge of current equipment and technology;
- Determine requirements for tools, spares, support equipment and wire necessary to support computer equipment, network and radio systems;
- Assure compatibility and coordinate the operation of microcomputer/network hardware and software;
- Develop appropriate tests to assure system reliability and implement all programs in appropriate test environments for parallel operation with current system;
- Communicate with vendors and other technical support personnel to resolve problems regarding microcomputer/network equipment, maintenance, etc.;
- Respond to emergency calls from customers for malfunctions in computer systems;
- Recommend computer hardware and software to support customer requests;
- Research and develop cost estimates for microcomputer equipment, software, and installation for departmental budgetary analysis and planning;
- Prepare technical bid specifications and proposals;
- Provide technical assistance with drafting and negotiating contracts for equipment, systems, and professional services;
- Install, configure, test and train customers on system software, including Telnet, FTP, WWW browsers, query tools, and other distributed software components;
- Employ Internet based resources including WWW browsers, mail systems, FTP and Telnet software as required to support County computer systems.

## **KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

- Working technical knowledge of telecommunications including hardware and software;
- Working technical knowledge of microcomputers including hardware and software;
- Working knowledge of programming techniques and concepts including microcomputer software: programming language, database & spreadsheet;
- Working knowledge of the concepts, principles and methodology of systems analysis as applied to computer programming;
- Good knowledge of governmental functions;
- Good knowledge of applicable laws, rules and regulations governing the use of software, as well as the judicial and administrative interpretation related to these;
- Good knowledge of computer network hardware, protocols, drivers, and related software;
- Skill in the operation of computer and communications equipment;
- Ability to learn new technology;
- Ability to understand and develop Entity Relationship Diagrams, Dataflow and code programs from them;
- Ability to establish and maintain working relationships with department heads, computer users, software contractors and members of the public requesting service;
- Good technical ability and knowledge of changing technology;
- Good judgment;

- Ability to train users in the use of hardware, software and telecommunications equipment;
- Ability to establish and maintain effective working relationships;
- Analytical reasoning ability, resourcefulness, dependability;
- Ability to communicate effectively both orally and in writing;
- Ability to write the technical portions of specifications for bid proposals;
- The employee's physical and mental condition shall be commensurate with the demands of the position, either with or without reasonable accommodations.

Originally created 12/14/1997

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**Complete Scope of the examination and Expanded subtest descriptions:**

1. Principles of networked communications

These questions test for basic concepts and terminology of data communications. They cover such subjects as data communications, types of networks, modems, security, protocols, topologies, transmission media, wiring, installation and troubleshooting. The questions are general in scope and are not specific to any vendor or system.

2. Preparing, written material

These questions test for the ability to present information clearly and accurately, and to organize paragraphs logically and comprehensibly. For some questions, you will be given information in two or three sentences followed by four restatements of the information. You must then choose the best version. For other questions, you will be given paragraphs with their sentences out of order. You must then choose, from four suggestions, the best order for the sentences.

3. Project management

These questions are designed to test for techniques and concepts of project management. They may cover, but not necessarily be confined to, management of systems development, management by objectives, project scheduling and control techniques (e.g., PERT), characteristics of organizations and of the systems life cycle, and the development of data processing standards.

4. Supervision

These questions test for knowledge of the principles and practices employed in planning, organizing, and controlling the activities of a work unit toward predetermined objectives. The concepts covered, usually in a situational question format, include such topics as assigning and reviewing work; evaluating performance; maintaining work standards; motivating and developing subordinates; implementing procedural change; increasing efficiency; and dealing with problems of absenteeism, morale, and discipline.

5. Systems analysis and design

These questions test for techniques and concepts of computer systems analysis and design. They cover such subjects as feasibility and applications studies, systems development tools and software, the systems life cycle, types of systems (e.g., client/server, Web-based), controls, and systems documentation, testing, and implementation.

The New York State Department of Civil Service has not prepared a test guide for this examination. However, candidates may find information in the publication "How to take a written test" helpful in preparing for this test. This publication is available online at: <https://www.cs.ny.gov/testing/testguides.cfm>

## FURTHER INFORMATION AND INSTRUCTIONS

Falsification of any part of the "Application for Employment" will result in disqualification.

Accepted candidates will be notified when and where to appear for the examination. If you do not receive your notice to appear at least three days before the date of the written examination, call Tompkins County Department of Human Resources at 274-5526. If an application is disapproved, due notice will be sent. This department does not make formal acknowledgment of the receipt of an application or take responsibility for non-delivery or postal delay.

Applicants must answer every question on the application form and make sure that the application is complete in all respects. Incomplete applications will be disapproved.

**ACTIVE MILITARY PERSONNEL, VETERANS OR DISABLED VETERANS** desiring to claim additional credit will request the Veterans Credits application form, at any time between the date of application for examination(s) and the date of the establishment of the resulting eligible list. You must meet the requirements set by NYS for these credits and they may be used only once. **YOU MAY NOT CLAIM ADDITIONAL CREDITS AFTER THE ELIGIBLE LIST HAS BEEN ESTABLISHED. IT IS THE CANDIDATE'S RESPONSIBILITY TO REQUEST THE VETERANS CREDIT APPLICATION FORMS AND TO SUBMIT THESE FORMS AND ANY SUPPORTING PAPERWORK BEFORE THE ELIGIBLE LIST IS ESTABLISHED.**

Tompkins County's written examinations are prepared and rated by the New York State Department of Civil Service in accordance with Section 23-2 of Civil Service Law. The provisions of the New York State Civil Service Rules and Regulations, which deal with the rating and review of the examinations apply.

The duration of the eligible lists may be fixed for a minimum of one and a maximum of four years and may be extended beyond four years if there has been a restriction against the filling of vacancies in that title.

The candidates must complete a separate "Application for Employment" for each open-competitive and/or promotional examination that the candidate is eligible to take.

All experience required meeting the acceptable training and experience is full-time experience. (Part-time experience will be credited on a prorated basis).

Appointment from an eligible list must be made from the top three candidates willing to accept the appointment.

Tompkins County is an Equal Opportunity Employer. As part of its efforts to provide employment opportunities to the physically handicapped, Tompkins County Civil Service has adopted a rule permitting the employment of qualified physically handicapped persons without competitive examination (pursuant to Section 55 of Civil Service Law). If you meet the minimum qualifications for this position and wish to know more about this rule, please contact the Tompkins County Department of Human Resources Office.

Unless otherwise notified, candidates are permitted to use quiet, hand-held, and solar or battery powered calculators. Devices with Typewriter Keyboards, Spell Checkers, Personal Digital Assistants, Address Books, Language Translators, Dictionaries or any similar devices are prohibited. You may not bring books or other reference materials.

**CROSS-FILING - APPLYING FOR CIVIL SERVICE EXAMINATIONS IN MULTIPLE JURISDICTIONS WHEN EXAMINATIONS ARE SCHEDULED ON THE SAME DATE:** When applying for examinations across multiple jurisdictions - all of which are scheduled on the same day - you must submit a Tompkins County Cross-Filing Form. This form must be submitted no later than 4:30 PM on the final filing date of the examination. On this form, list each examination that you are taking and then tell us where you would like to sit. The purpose is to ensure that all of the test materials for the various examinations that you are taking will be available in one location. If you do not provide the cross-filing form to us by the final filing date, we cannot ensure that we can accommodate your desire to cross-file. If any of the examinations are State level examinations, you must sit at the State test center. You will still need to complete the Tompkins County cross-filing form. If sitting at the State site, the State will notify you of when and where to report for your examination(s) and you should bring all admittance letters to the State site. If you are not taking a State examination, bring all admittance letters to your chosen testing site. If you have any question please call Tompkins County Department of Human Resources Department (607) 274-5526. The Cross File form is located at <http://www.tompkins-co.org/personnel/CivilSrvForms/index.html>

**FOR RELIGIOUS ACCOMMODATION AND HANDICAPPED PERSONS:** If special arrangements for testing are required, please indicate this on your application.

**ALL CANDIDATES FOR EMPLOYMENT FOR POSITIONS IN SCHOOL DISTRICTS AND BOCES GOVERNED BY TOMPKINS COUNTY CIVIL SERVICE MAY HAVE THE FOLLOWING SPECIAL REQUIREMENT. PER CHAPTER 180 OF THE LAWS OF 2000, AND BY REGULATIONS OF THE COMMISSIONER OF EDUCATION, TO BE EMPLOYED IN A POSITION DESIGNATED BY A SCHOOL DISTRICT OR BOCES AS INVOLVING DIRECT CONTACT WITH STUDENTS, A CLEARANCE FOR EMPLOYMENT FROM THE STATE EDUCATION DEPARTMENT IS REQUIRED.**

In conformance with Section 85-a of the Civil Service Law, children of firefighters and police officers killed in the line of duties shall be entitled to receive an additional ten points in a competitive examination for original appointment in the same municipality in which his or her parent has served. If you are qualified to participate in this examination and are a child of firefighter or police officer killed in the line of duties in this municipality, please inform this office of this matter when you submit your application for examination. A candidate claiming such credit has a minimum of two months from the application deadline to provide the necessary documentation to verify additional credit eligibility. However, no credit may be added after the eligible list has been established.

**BACKGROUND INVESTIGATION:** Applicants may be required to undergo a State and national criminal history background investigation, which will include a fingerprint check, to determine suitability for appointment. Failure to meet the standards for the background investigation may result in disqualification.

TOMPKINS COUNTY PERSONNEL DEPARTMENT, 125 EAST COURT STREET, ITHACA, NY 14850