

Volume

1

**NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS**

Division of Codes and Standards



# Program Manual for Technical Assistants

A 50-HOUR CERTIFICATION PROGRAM FOR

# New Jersey's Technical Assistants

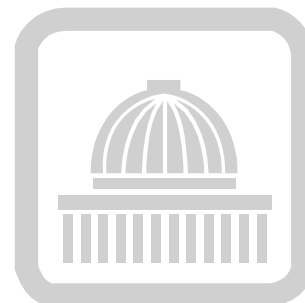
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# Certification Program for Technical Assistants

*This section of the Manual provides a look at the Program now required of Technical Assistants in the State of New Jersey*

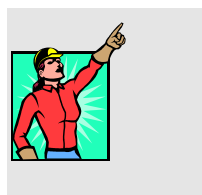
**W**elcome to the new Certification Program for Technical Assistants! This program is now administered through the county community colleges of the State of New Jersey. It is a 50-clock-hour program, consisting of two Modules: (1) a Technical Competencies Module and (2) an Administrative Competencies Module. The program has been designed to provide a sound basis of knowledge and understanding of the technical and administrative skills needed to help you meet the demands of the position.

I C O N   K E Y	
	Important
	Information
	Test knowledge
	Stop and Look
	Workbook review

The Manual you are reading provides a wealth of material related to the 50-hour program you are required to complete for certification.

## How to Use This Manual

This manual provides information regarding the content of each of the programs you will complete. Bring it with you each time you attend a class session. Review the information in this



Manual from time to time to reinforce your understanding of the content of each program.

Please note the following:

It is likely that individual instructors will modify the content of each course to adapt it to their teaching style, approach to the content, and the like. Instructors will be provided with a manual similar to this one, so they will be familiar with the manual material you have in your possession. By placing this material in the hands of both participants and instructors, it is hoped that each program will be tailored to fit the needs of the Technical Assistants enrolled in this program.

## Overview of the 50-hour Program

The Certification Program for Technical Assistants is a 50 clock-hour program. It consists of two Modules:

This Program consists of two Modules: A Technical Competencies Module and an Administrative Competencies Module

- A Technical Competencies Module, comprising 70% of the program
- An Administrative Competencies Module, comprising 30% of the program

These modules represent an appropriate division based upon the current needs of Technical Assistants in UCC offices. Every effort has been made to cover areas which require technical expertise; in addition, a sufficient number of hours has been devoted to enabling the Technical Assistant to handle the administrative functions of the UCC office, especially as those functions relate to the ability to communicate effectively with a variety of constituencies.

The Technical Competencies Module consists of thirty-five clock-hours of instruction

The Technical Competencies Module consists of thirty-five clock-hours of instruction in the following program areas:

- |  |          |
|--|----------|
| A. Computer Training   | 10 hours |
| B. Construction Blueprint Reading & Plan Review                            | 5 hours  |
| C. UCC Law   | 5 hours  |
| D. UCC Administration:<br>Record-Keeping, Forms,<br>& Municipal Procedures | 5 hours  |
| E. Construction Fundamentals:<br>Understanding Code Requirements           | 5 hours  |
| F. Technical Problem-Solving   | 5 hours  |

These programs will address the following **Technical Competencies**:

- A. the ability to understand, interpret, and apply the rules and regulations from an array of applicable codes and standards, including UCC laws, construction, electrical, plumbing, and fire codes, as determined by the N.J. Department of Community Affairs

- B. the ability to understand, interpret, and apply relevant principles of blueprint reading and plan review to the most common construction sites and settings
- C. familiarity with code requirements for the following categories of structures (i.e., commercial, residential, high-hazard, recreational, etc.)
  - 1. sites most commonly found within one's own township or municipality
  - 2. sites which could be added to one's own township or municipality
  - 3. sites found within a 50-mile radius of one's own township or municipality
- D. the ability to use computer hardware (including printers and scanners) and software related to the work of the Technical Assistant, including a current operating system, State-mandated reporting software, MS Word, MS Works, spreadsheets, and templates
- E. familiarity with the many forms and formats required by the State of New Jersey to ensure compliance with construction and related codes
- F. the ability to move from "knowns" to "unknowns" in technical problem-solving on a daily basis; knowing how to handle unfamiliar occurrences and exceptions; knowing where to look for answers to technical problems; knowing when and how to request assistance from the N.J. Division of Codes and Standards
- G. familiarity with UCC office budgets, material costs, tracking and posting to a spreadsheet; budget preparation and related reports

The Administrative Competencies Module consists of fifteen clock-hours of instruction in the following program areas:

- A. Basic Communication Skills 15 hours
  - 1. Work Place Dynamics (3 hours)
  - 2. Time Management & Delegation (3 hours)

3. Conflict Resolution & Stress Management (3 hours)
4. Job Duties & Responsibilities:  
Working with my Supervisor (3 hours)
5. Critical Thinking & Problem-Solving:  
Working with Other Professionals (3 hours)
  - a. Code Officials
  - b. Attorneys
  - c. Architects & Engineers
  - d. Business Owners
  - e. Residents/Public-at-large
  - f. Contractors, Sub-contractors
  - g. Politicians and Governing bodies

These programs will address the following **Administrative Competencies**:

- A. the ability to manage a UCC office environment
- B. the ability to manage the use of time and to implement time management strategies for a more productive work environment; the ability to implement strategies for working smarter, not harder; the ability to set priorities and establish work agendas; the ability to assign tasks to ensure timely completion; knowing how to delegate
- C. the ability to prevent conflict and to resolve conflict when it occurs
- D. the ability to implement plans of action for stress reduction
- E. the ability to communicate with and interact effectively with the public, contractors, engineers, attorneys, political bodies, and construction code officials
- F. the ability to speak and write effectively  
(Note: since these skills are best developed over an extended period of training time, those who enroll in this certification program are strongly encouraged to take one course each in public speaking and technical writing at their convenience)

The following pages offer a suggested **Syllabus** for each of the Technical and Administrative Programs listed above.

# Certification Program for Technical Assistants

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## Syllabi: Technical Programs

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Program: Computer Training  
10 clock hours



### Course Outline

- I. Program Overview
- II. Computer Hardware
  - A. CPUs
  - B. Hard Drives
  - C. Monitors
  - D. Keyboard & Mouse
  - E. Floppy Disks & CDs
  - F. Printers
  - G. Scanners



III. Computer Operating Systems

- A. Windows 98
- B. Others

IV. Software for the Technical Assistant

- A. MS Word
- B. MS Works
- C. Spreadsheets (Excel)
- D. Other
  - 1. home design software
  - 2. building software
  - 3. software for electrical, plumbing

V. Of Interest to Technical Assistants

- A. Creating Files, Folders, Templates
- B. Using Existing Templates
  - 1. for letters, memos
- C. Handling Repetitive Tasks with Computers and Scanners
  - 1. scanning all UCC forms into your computer
  - 2. turning forms into writable files
  - 3. software needed to upgrade scanner capabilities
- D. Producing a UCC Office Newsletter/Information Pieces
- E. Using spreadsheets to track income and expenditures
  - 1. entering data
  - 2. keeping running monthly, yearly totals
- F. Routine Computer Maintenance
  - 1. utility programs already in your computer
  - 2. automating routine maintenance schedules
- G. Anti-Virus Protection
  - 1. protecting the office computer(s)
  - 2. caution with diskettes/CDs from outside sources

**Understanding This Material**



If you have never used a computer, or you think you are “afraid” of them, then this program should help to make you more comfortable with the whole idea. Remember that the purpose of this program is to make you a computer USER, not a programmer. You need not worry that the course material will be “too technical.”

Once you begin to use the computer in your office, you will wonder how you ever worked without it. Think of the computer as a very useful tool that will make your work day easier and give you time to complete other duties.

## Learning Tips

- Today most computer software is “menu-driven.” This means you are usually presented with a series of choices – you use the mouse pointer to click on something, and you are presented with a set of choices. The software program will usually ask you what it is that you would like to do.
- Don’t try to remember every single point from the program presentation if you are not used to using a computer – get the “big picture,” the overview. The “details” are usually somewhere in the computer or the software. Everything you need is there.
- Nowadays software programs come with very little written “documentation” – that is, a manual which helps you with your understanding and use of the program. Instead, there are two options: (1) you can buy such manuals from the software manufacturer or a bookstore, or (2) you can use the “Help Index” built into the software itself. Of course, this gives you the needed understanding of the program in “bits and pieces” and makes any real overview difficult. So recognize this fact going in. Think of the “Help Index” as a self-teaching tool, and this approach will make it a little easier for you to use.



After completing this program, you should be able to:

- IDENTIFY pieces of computer hardware and UNDERSTAND how they work
- USE the computer to perform UCC office tasks
  - CREATE files, folders, and templates
  - USE templates to save time with repetitive tasks
  - USE templates to create documents
  - CREATE spreadsheets and databases
- USE the State’s online information and reporting systems
- KNOW HOW to USE a scanner to copy forms into your computer



### **Test Your Knowledge!**



1. Describe time-saving uses for the computer in the UCC office.
2. How do you create files and folders?
3. Why should I set up a series of spreadsheets for the office?
4. How will the use of a scanner make my job easier?







**Questions I need answered:**

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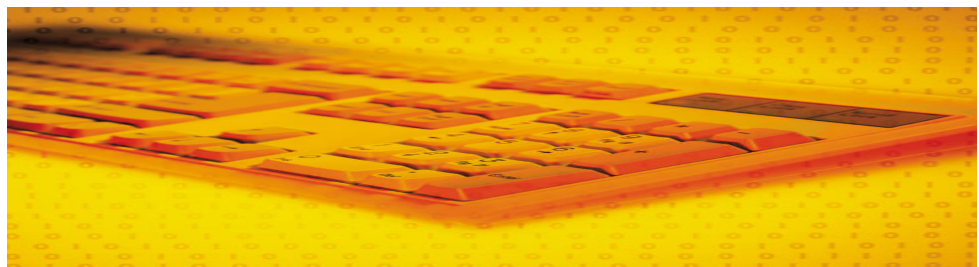
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**NOTES:**



Program: Construction Blueprint Reading & Plan Review  
5 clock hours



Course Outline

I. Program Overview

II. Blueprint Signs, Symbols, & Notations

III. Residential Blueprint Reading

- A. Presentation Drawing
- B. Floor Plan
- C. Foundation Plan
- D. First & Second Tier Framing Plans
- E. Roof Framing Plan
- F. Front & Rear Elevations
- G. Side Elevations
- H. Electrical Plan
- I. Heating Plan
- J. Plumbing Plan
- K. Section Drawing
- L. Random details
- M. Kitchen details
- N. Fireplace Details
- O. Stair Details
- P. Plot Plan

IV. Commercial Blueprint Reading

- A. Cover Sheet

- B. Plot Plan
- C. Foundation Plan & Details
- D. Plaza Plan
- E. Typical Floor Plan
- F. Front, Rear, Side Elevations
- G. Interior Details
- H. Schedules
- I. Electrical, Heating, and Floor Plans
- J. Steel Framing Plan
- K. Roof Framing Plan
- L. Steel details
- M. Concrete Slab Plan

### Understanding This Material



As a Technical Assistant, you will work with others who have blueprints and plans for proposed or existing structures. You need to be conversant with such materials: to be able to “visualize” 3-dimensional structures by looking at a one-dimensional rendering. Some people are very good at visualizing such objects; others may have to work at it a little harder. Eventually, you will get “the hang” of things.

You will find blueprint reading skills helpful in your discussions with homeowners seeking to improve their dwellings, Code officials, architects, engineers, and contractors. Familiarity with blueprints and plan review will enable you to carry on such interactions in a professional manner and earn the confidence of those with whom you work.


### Learning Tips

- Pay close attention to the signs and symbols normally found on blueprints and drawings. You will have these committed to memory after you have spent some time working with them. The symbols and notations are the “nuts and bolts” of blueprints, so it is helpful to be able to recognize them readily.
- Since plans constitute an important part of your work – looking at them, reading them, visualizing them, interpreting them – you may wish to consider looking at existing home and building design software packages. Prices vary, from moderate to expensive, but all are worth your examination.
- Working with blueprints can help you point out potential problems to homeowners and others: will the structure be sound? attractive? is it feasible? does it meet various Code requirements? will the materials costs be reasonable? So plans

are a very important part of your professional life. They are a very good communication tool and in the long run, they may help you help others invest time and dollars wisely.



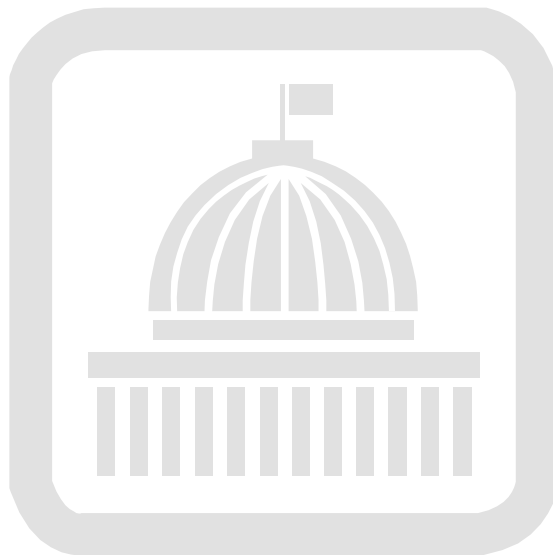
After completing this program, you should be able to:

- IDENTIFY blueprint symbols and notations
- INTERPRET blueprint symbols and notations
-  • EXPLAIN HOW structures will appear, based on the plans
- USE blueprints in working with Code officials and contractors
- CREATE simple plans for the most common residential additions or improvements
- DISCUSS blueprints with residents and construction professionals, such as architects and engineers

#### Test Your Knowledge!



1. What are some common symbols and notations seen on plans?
2. How accurate must blueprint measurements be?
3. Who needs to provide the UCC office with a set of blueprints?
4. What are some “blueprint musts” I should look for?









**Questions I need answered:**

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**NOTES:**



Program: UCC Law  
5 clock hours



Course Outline

- I. Program Overview
- II. The State of NJ Uniform Construction Code Act
  - A. History
  - B. Component parts
- III. The Legislative Process
- IV. The Administrative Process
- V. The Organizational Structure of the UCC
- VI. The Relationship of Current Regulations and Practices to the Act Itself
- VII. The Code Advisory Board
- VIII. Office and Responsibilities of the Commissioner
- IX. The Duties of the Construction Code Official
- X. Licensure Requirements
- XI. Agency Fees

XII. The Construction Board of Appeal

XIII. Permits, Inspections, Certificates, Violations, and Appeals

XIV. Substitute Administration and Enforcement

**Understanding This Material**



This program provides the rationale for the existence of the office and the work you do. It gives you some feel for the history -the roots- of the UCC and its offices. It is helpful to understand the “whys and wherefores” of your responsibilities. If you wonder why you hold the position you do, this program will provide an answer to that question.

It will be helpful for you to understand the organization and structure of the UCC Act. Its components provide the bases for much of what you do, including such matters as permits, fees, violations, appeals, job qualifications, education and training.

**Learning Tips**

- It is not necessary for you to memorize the UCC Act or its components, but you should be familiar with its provisions in a general way. Since you will “use” much of what it requires, the work you do will demonstrate that you are aware of its stipulations.
- Keep the material from this program in an accessible place so that you can refer to the provisions of the UCC Act when needed.
- Remember that the provisions of the UCC Act may be added to or amended from time to time. It is a living document. Make sure that you keep current when it comes to understanding what is in the UCC Act.
- In working with this material, remember that some things need to be learned for their own sake. They are not necessarily “fun” to learn, but they are worth knowing. Many report that they find the study of the UCC Act “interesting.” That is a good thing to keep in mind as you explore it.

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After completing this program, you should be able to:



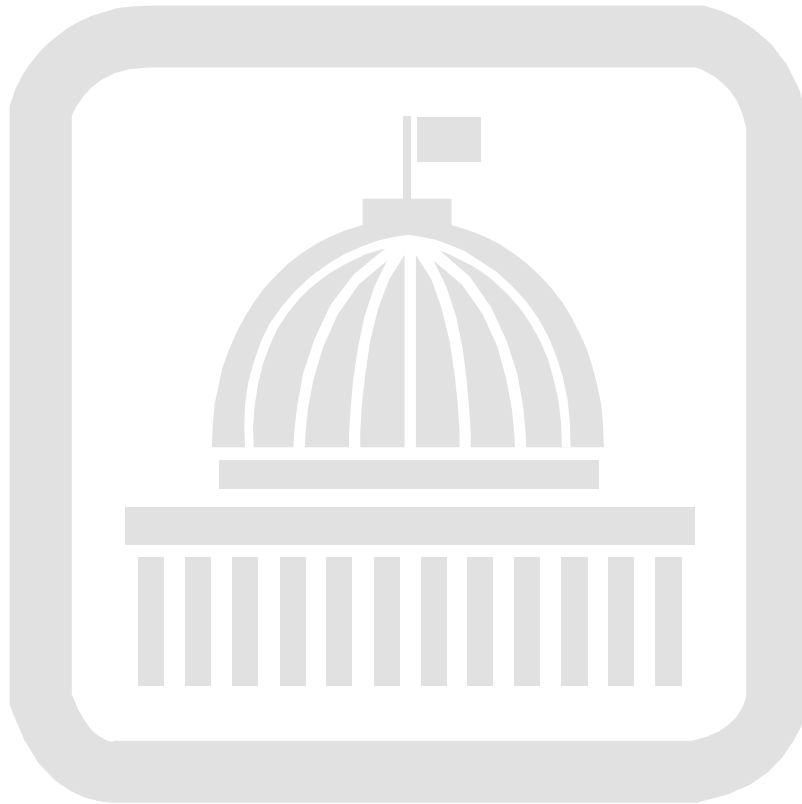
- UNDERSTAND the overall purposes and intent of the UCC Act
- EXPLAIN at least some of its provisions

- NAME some of its component parts and the matters the Act addresses
- EXPLAIN the work of the Technical Assistant in light of the UCC Act

**Test Your Knowledge!**



1. Why is it necessary to have the UCC Act?
2. What is its primary purpose?
3. What is: the Code Advisory Board? the Board of Appeal?
4. List some reasons **NOT** to issue a Certificate of Occupancy.









**Questions I need answered:**

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**NOTES:**



Program: UCC Administration: Record-Keeping, Forms, and Municipal Procedures  
5 clock hours



Course Outline

I. Program Overview

II. Review of Forms & Formats

- A. Purposes of selected forms
- B. Permits, Violation Notices
- C. Certificates of Occupancy
- D. Stop-Work Orders
- E. Others as selected by the Instructor

III. Procedural Requirements

- A. Knowing how to proceed
- B. Knowing when to proceed
- C. Knowing when to stop and ask a question
- D. Why it is important to follow procedures
- E. Legal implications

IV. Applications and Permits

V. Inspections and Inspection Reporting

VI. Certificates

VII. End-of-month Reporting

VIII. Cyclical Inspections, Elevators

IX. Notices and Appeals

X. The Municipal Procedures Manual

XI. Participants' Forum

A. Q&A

B. Review of Form Information

1. The Content of Forms
2. Suggestions for Form Revision
3. How Forms are actually used in UCC Offices

**Understanding This Material**



This program offers the opportunity to examine and understand the myriad forms of the UCC office and their requirements. It is a place for you to learn what is done and how it is done: how procedures and requirements are met (or avoided) in various UCC offices around the State. Talking to others in your class and to the Instructor will help you determine what MUST be done and the proper way to fulfill expectations.

Things are done in particular ways to ensure uniformity and clarity and to enable the State of New Jersey and DCA to make accurate assessments of Code requirements and necessities, and to develop additional provisions and requirements based on the experiences of those who work in the field. It may not always “appear” that way; at such times it is important to keep the “big picture” in mind. You are responsible for implementation and enforcement. Others are responsible for making sure that practices and requirements ensure the safety of the citizenry.

So remember the “big picture” when considering individual requirements or when things don’t seem to “make sense.” There may be good reasons why things are set up as they are.

**Learning Tips**

- Understand the reason(s) behind each form or procedure required in the UCC office.
- If your office does not routinely complete all of the information required on certain forms, discuss the matter with others and with the Division of Codes and Standards – ask for clarification.

- Record-keeping is a very important part of the work of the Technical Assistant. Learn the proper way to do things, as required by the State. If you have questions or would like to see revisions, remember there are ways for you to address those matters. But until such time as changes or revisions are made, follow procedures. Remember that your work requires you to see to it that others follow the rules. So set the example yourself. Learning proper procedures makes the job easier for everyone up and down the line!



After completing this program, you should be able to:

- IDENTIFY the types of forms and permits required for use in the UCC office

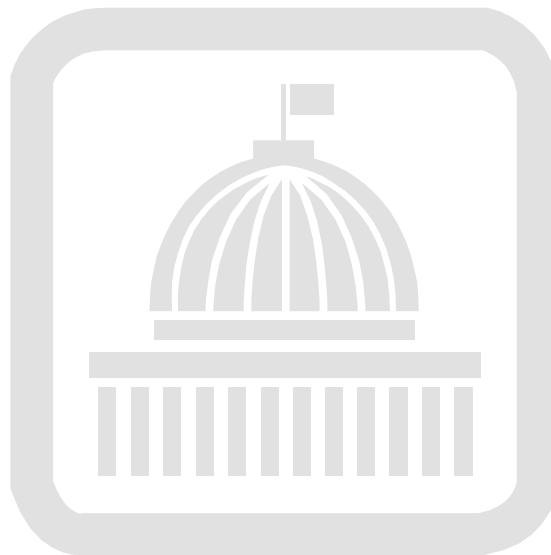


- UNDERSTAND how to complete forms, permits, violation notices, and COs
- Show UNDERSTANDING of the requirements of the Municipal Procedures Manual
- EXPLAIN how to complete end-of-month reports
- UNDERSTAND how to complete all State-Mandated reports

### Test Your Knowledge!



1. What is covered in the Municipal Procedures Manual?
2. What do I include in end-of-month reports?
3. How are permit fees determined?
4. What is covered in “typical” kinds of inspection reports?







**Questions I need answered:**

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**NOTES:**



Program: Construction Fundamentals: Understanding Code Requirements  
5 clock hours



Course Outline

I. Program Overview

II. Construction Fundamentals

- A. Foundations
- B. Framing
- C. Weight-bearing Walls & Structures
- D. Materials & Costs
- E. Job Estimating
- F. Materials Estimating
- G. Basic Math Calculations
- H. Measuring & Cutting
  - I. Construction “rules-of-thumb”
    - 1. proven shortcuts that everyone can understand
    - 2. reconciling “book learning” and real-world experience
  - J. Adherence to Codes
    - 1. rationales for selected Code requirements (WHY?)
    - 2. reconciling Code conflicts
  - K. Permits & Fees
  - L. Helping “do-it-yourself-ers”

III. Overview of “You Can Build It!” (or equivalent reference)

IV. A Review of Construction Fundamentals

- A. Residential construction
- B. Commercial construction
- C. High-hazard structures
  - 1. construction



- 2. location & environmental impact
  - 3. special considerations & requirements
- D. Recreational construction

### Understanding This Material



A basic understanding of construction fundamentals will help you communicate effectively with other professionals and the public-at-large. It is helpful to understand both the “what” and the “why” of sound construction principles. In this way, you can anticipate the questions of others and prevent problems before they happen.

Some basic knowledge will help you formulate your own questions of others and ensure that things are done correctly. As you talk with other professionals, you will have a good foundation on which to build additional, more complex information, as your depth of knowledge increases.

### Learning Tips

- Focus on an understanding of the “basics.”
- Try to understand how the various Codes inter-relate. If possible, understand both the “what” (how to do something) and the “why” (reasons for this or that Code requirement). Both levels of understanding will help you communicate well with the many constituencies.
- Understand basic math calculations and “rules of thumb.” If you do not understand, ask your instructor to explain things to you. If you do not understand, there may be others who are unclear also.
- Make a list of the kinds of “typical” questions people ask you in your capacity as a Technical Assistant. Be sure that after completing this program, you feel confident that you could answer those kinds of questions to the satisfaction of all parties.

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After completing this program, you should be able to:



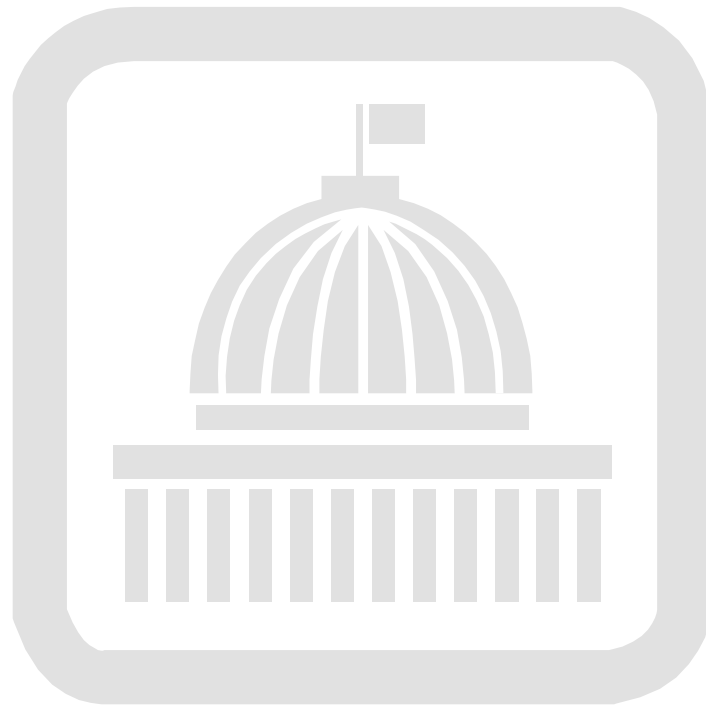
- UNDERSTAND selected principles of construction
- EXPLAIN those principles to others
- IDENTIFY terminology used in construction
- IDENTIFY ways to explain or reconcile Code conflicts
- EXPLAIN selected Code sections to others

- USE “rules-of-thumb” for estimating common residential job costs and material requirements

**Test Your Knowledge!**



1. What should I know about weight-bearing walls?
2. List three construction “do’s”; three construction “don’ts.”
3. “How much wood do I need for my deck?”
4. How do I check my understanding of what I read in a Code book?







**Questions I need answered:**

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**NOTES:**



Program: Technical Problem-Solving  
5 clock hours



Course Outline

I. Program Overview

II. Most Common Construction Code Mistakes and Oversights on the part of

- A. Inspectors
- B. Contractors
- C. Residents
- D. Business people
- E. Architects
- F. Other professionals

III. Reconciling Conflicting Code Requirements

- A. Within Codes
- B. Among various Codes

IV. Interpreting Codes Accurately

- A. What does it REALLY mean?
- B. Finding the intended meaning
- C. Avoiding inaccurate interpretations

V. How to Prevent Technical Problems Before They Occur

VI. Getting Sub-contractors on “the same page”

VII. Solving the “Unavoidable” Problems

VIII. Implementing Steps for Learning from Mistakes

IX. Identifying the Necessary Technical Problem-Solving Skills

- A. Careful observation
- B. Understanding of key terms and concepts
- C. Understanding fundamental principles (construction, electrical, plumbing)
- D. Making sure “the language” is not confusing
- E. Comparing understandings of others with others
- F. Making clear explanations of matters
- G. Testing assumptions before proceeding
- H. Asking for each person to summarize his/her understanding

X. Applying Technical Problem-Solving Skills to Selected Situations

### **Understanding This Material**



At least some of the work of the Technical Assistant involves working with others to solve technical problems. Many times such problems are oversights – something obvious that was overlooked by someone connected to a building project. Being aware of common problems and how to spot them can be a very valuable skill and time-saver.

Think about the skills it takes to either prevent or solve technical problems related to design and construction. Then be sure that you know how to apply those skills in your role as a Technical Assistant.

### **Learning Tips**

- Be sure you can identify what is meant by a set of technical problem-solving skills.
- Be sure you can apply that set of problem-solving skills.
- Be sure you know when others do not understand your explanations. Be sure to acknowledge your understanding of others or the lack thereof.
- Be sure you know how and where to look for the most common oversights related to design and construction.



After completing this program, you should be able to:

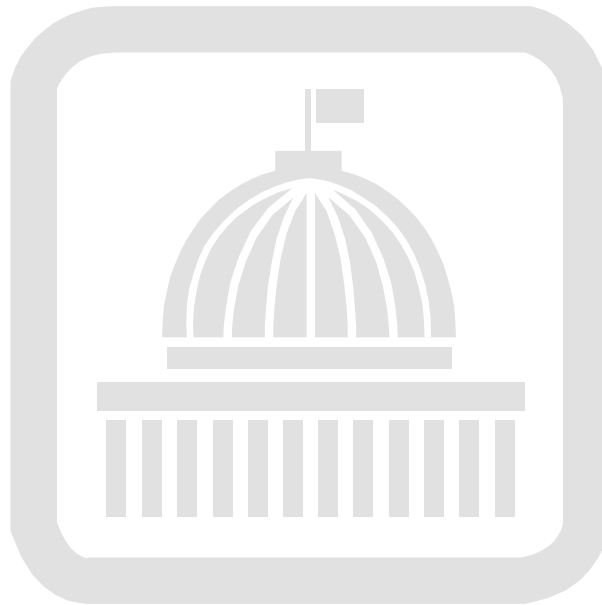


- IDENTIFY common technical problems related to construction
- NAME some frequent oversights and omissions
- EXPLAIN how to solve common problems, oversights
- IDENTIFY a set of problem-solving skills to be applied when such technical problems arise
- IDENTIFY the reasons for and solutions to the most frequently seen technical problems

### Test Your Knowledge!



1. What steps can I take to catch common technical oversights?
2. What technical problem-solving skills should I possess?
3. What safeguards will ensure smooth completion of projects?
4. Give some examples of potential Code conflicts.









**Questions I need answered:**

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**NOTES:**



# Certification Program for Technical Assistants

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## Syllabi: Administrative Programs

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Program: Work Place Dynamics  
3 clock hours



### Course Outline

- I. Program Overview
- II. Defining Work Place Dynamics
- III. Job Descriptions and Expectations
  - A. When was the job description written?

- B. Determining the reasonableness of job expectations
- C. Defining a reasonable daily, weekly work load

IV. Managing the day-to-day Operations of the UCC office

- A. Developing work schedules
- B. Assigning tasks
- C. Avoiding tension and conflict

V. Maintaining a Professional Image

VI. Effective Communication On-the-Job

- A. Defining strategies for maintaining effective interactions
- B. Allowing the open expression of opinions & ideas
- C. Recognizing feelings
- D. Encouraging initiative
- E. Risk-taking

VII. Job Performance Reviews

- A. Purposes
- B. Types
- C. Pros & Cons
- D. Creating desirable performance review formats

VIII. Making Use of Feedback laterally and vertically

- A. Feedback peer-to-peer
- B. Feedback to the boss
- C. Feedback from the boss

IX. Quality of Interactions With Others

- A. How problem interactions develop
- B. How to minimize interaction problems
- C. Factors that help to maintain effective professional relationships

X. Identifying and Monitoring the Effects of Office Dynamics  
on Employee Morale and Productivity

- A. Factors that reduce morale
- B. Factors that increase morale & productivity
- C. Measuring the impact of influences on morale & productivity

## XI. Creating and Maintaining a Positive Work Place Atmosphere

- A. Strategies for developing a favorable atmosphere
- B. Ways to take the work place atmosphere “pulse”
- C. Using employee input to promote effective office dynamics

### Understanding This Material



Whenever people work together, the possibility for interaction difficulties exists. It is not necessary for office environments to be negative places. Problems usually arise because people do not think about the effects their behaviors have on others. Sometimes people assume that the “boss doesn’t like them” or that their work is not appreciated. And, yes, sometimes those assumptions are correct.

The work place can be a positive environment where employees like to gather for mutual job satisfaction. However, in most places there is some work that needs to be done to ensure success. It will not happen on its own. Work place satisfaction, morale, and productivity must be cultivated.

Remember that work places HAVE a dynamic to them. It begins the moment people walk in the door. Office dynamics are readily set in motion. If you do nothing, they develop in a random, haphazard fashion, and before too long, contamination among employees has begun. So keep in mind that in addition to the technical work that must be done, there is “people work” to be done as well.

### Learning Tips

- Be sure that you can identify the factors that weaken a positive work environment. At the same time, be sure you can identify strategies for solving and avoiding dynamics problems.
- Try to list the reasons why office interactions deteriorate: these can be matters of personality, maturity, level of education, personal goals, unresolved conflict, misplaced anger, and the like.
- By the time you complete this course, you should have a better understanding of steps you can take to maintain a harmonious office setting. As you participate in the program, make a list of such techniques and share them with those with whom you work. Spend some time in a meeting discussing what each person can do to ensure a positive and productive work place.



After completing this program, you should be able to:

- DEFINE what is meant by Work Place Dynamics
- IDENTIFY impediments to a positive work environment
- IMPLEMENT strategies for creating a positive environment
- TAKE STEPS to improve employee morale
- IDENTIFY strategies for increasing productivity
- ESTABLISH ways to ensure feedback about work efforts and initiatives
- STRENGTHEN the quality of employee interactions
- CREATE a place where people LIKE to come to work



**Test Your Knowledge!**



1. What is meant by Work Place Dynamics?
2. What factors influence worker productivity and morale?
3. How can I establish realistic job performance standards?
4. How do I strengthen the quality of my interactions with others?









**Questions I need answered:**

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**NOTES:**



Program: Time Management and Delegation  
3 clock hours



Course Outline

- I. Program Overview
- II. Defining Time Management
- III. Identifying Time-Savers and Time-Wasters
- IV. Establishing Typical Times for Completing Certain Tasks
- V. Distributing Work Responsibilities Equitably
- VI. Reducing the Stresses of Ineffective Time Management
- VII. How to Address Time Management Issues with Others
- VIII. Creating To-Do Lists
- IX. Creating and Implementing Action Plans
- X. Setting Priorities
- XI. Managing Repetitive Tasks More Efficiently
- XII. Strategies for Making More Productive Use of Time

## XIII. Techniques for Delegating

**Understanding This Material**

Given the demands of the position of Technical Assistant, the use of effective time management skills is an important part of the job. Better time management and delegation mean less job stress, increase both the quantity and quality of completed work, and help to minimize errors. Effective time management requires careful thought and observation: looking at the way things are done to determine if there are more strategic ways to conduct business. This program should provide you with techniques for completing a greater number of tasks in less time than it currently takes.

**Learning Tips**

- It may help you to make a list of tasks you routinely handle in your office. Then estimate (or “guess-timate”) the amount of time you think it takes to complete each task. You may find that you overestimate in some cases, underestimate in others.
- It is valuable information to determine how long it takes to complete routine tasks, and then decide how long it SHOULD take to complete this or that task in a reasonable period of time. Such assessments are not easily determined. Some people simply work faster than others – it does not mean everyone could perform at the same rate. The questions are: what can be done to help others improve? How can a reasonable standard be established?
- As you participate in this program, think about ways to “re-do” or reroute or reassign tasks. Determine who likes to do what; redistribute tasks based upon preferences of employees.
- Make a list of time management strategies you will discuss in your work place. Look at the steps involved in performing certain tasks. Can the number of steps be reduced? Break down tasks into their component parts and see if some steps can be eliminated.
- Check the order and time at which things are done. You may see more expedient ways to get things done by making some careful observations.
- It is sometimes easier to make suggestions to others about ways to save time than to try and solve our own time management problems. Someone who is completely outside the problem can sometimes be the most helpful problem-solver.



After completing this program, you should be able to:

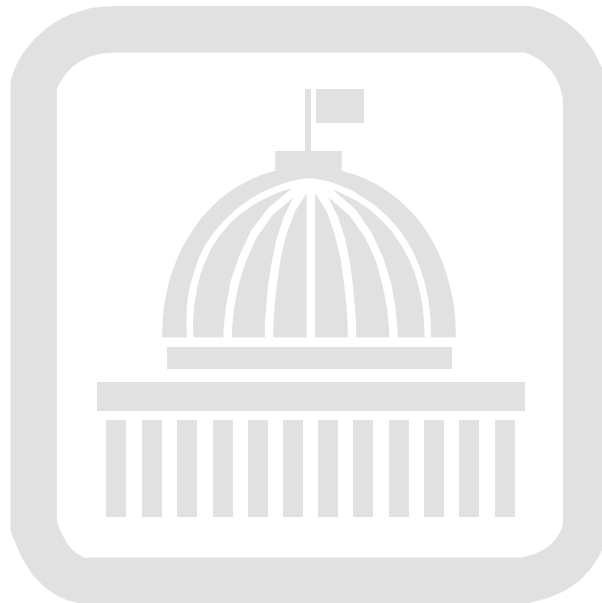


- IDENTIFY ways to use time effectively
- IDENTIFY time-wasters and time-saving strategies
- REDISTRIBUTE work tasks equitably
- CALCULATE the amount of time it takes to complete routine tasks
- USE your computer to automate repetitive tasks

**Test Your Knowledge!**



1. List some time-wasters and time-savers.
2. How do I distribute work tasks equitably?
3. How do I determine how long a task should take?
4. How will I know when we are making productive use of time?







**Questions I need answered:**

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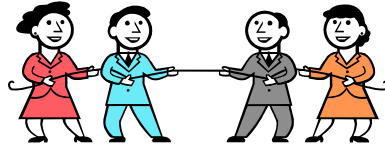
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**NOTES:**





Program: Conflict Resolution & Stress Management  
3 clock hours



### Course Outline

I. Program Overview

II. Conflict and Conflict Resolution Defined

III. Factors Which Contribute to Conflict

- A. Personality
- B. Language
- C. Poor problem-solving skills
- D. Poor listening habits
- E. Unwillingness to compromise
- F. Faulty assumptions
- G. High stress
- H. Poor nutrition

IV. Conflict Reduction Techniques

V. The Role of Language in Conflict

VI. Personality, Conflict, and Stress

VII. How Conflict Creates Stress: Effects & Consequences

VIII. Stress Reduction Techniques

IX. How to “Defuse” Conflict

X. Dealing with Anger

XI. Techniques for Conflict Prevention

### Understanding This Material



Conflict occurs for many reasons. It is important for people who work together to recognize that conflict is sometimes unavoidable, but it is almost always manageable.

This program should enable you to examine the interactions of your office staff to determine ways to minimize disagreements and work together to solve problems.

This program should offer you some strategies for disagreeing “without being disagreeable.” It should help you identify feelings associated with conflict and tension, and it should help you adjust those feelings in a positive direction.

### Learning Tips

- One can learn to manage conflict by looking for its verbal and nonverbal “signs and symptoms.” Be sure you can identify what those are.
- Remember that language plays a key role in resolving and preventing conflict. There are many ways to render the same idea. Listen for ways that inflame – and ways that promote cooperation and compromise.
- Programs like this one typically ask participants to engage in group activities or exercises designed to draw matters “out into the open,” so that the group can identify behaviors that reduce or encourage conflict. Participate fully – try to make your choices as “most like you” as you can, so that you can readily see what works and what doesn’t. Pay attention to what others tell you. If ten others tell you this or that behavior choice does no good, is it likely that all of them are wrong? Take careful notes and try some behavior changes at work to see if they reap any rewards.
- Point out the value of what you learn in the exercises to others at work. See if you can get them to benefit from what these interactions have taught you. Discuss what you learn from the exercises with others at work – perhaps even do the exercises with them.



After completing this program, you should be able to:



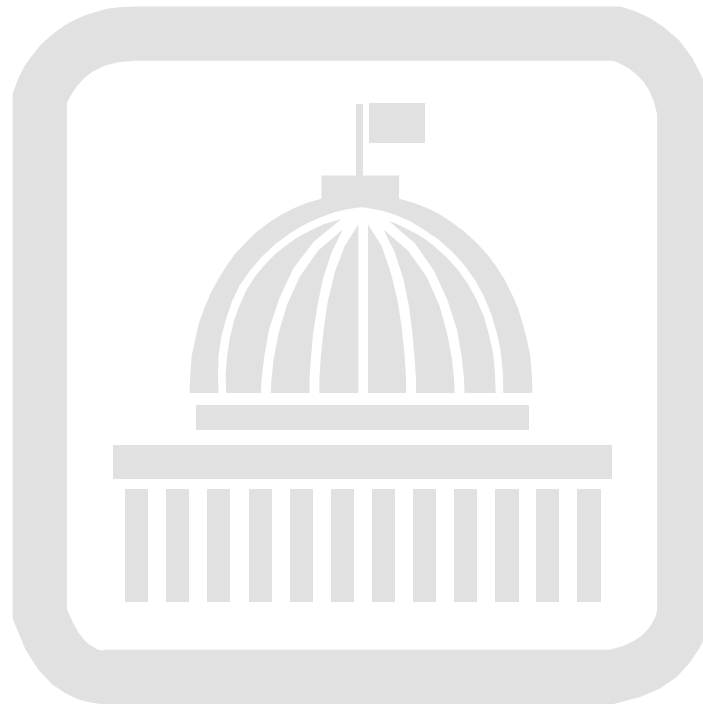
- DEFINE conflict and conflict resolution
- IDENTIFY ways to RESOLVE conflict
- IDENTIFY ways to PREVENT conflict

- DESCRIBE personality traits and their role in conflict
- EXPLAIN strategies for DEFUSING tense situations
- DESCRIBE ways to deal with anger
- EXPLAIN the role of language in conflict and conflict resolution
- DESCRIBE steps to take to minimize STRESS in the work place

**Test Your Knowledge!**



1. Define conflict and conflict resolution.
2. List some strategies for preventing/resolving conflict.
3. What should I/we do at the **FIRST** sign of conflict?
4. How does language contribute to/reduce conflict?







**Questions I need answered:**

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**NOTES:**



Program: Job Duties & Responsibilities: Working with my Supervisor  
3 clock hours



Course Outline

- I. Program Overview
- II. Job Requirements for Technical Assistants: Duties & Expectations
- III. Communicating and Clarifying Job Responsibilities
- IV. Reviewing & Evaluating Policies & Procedures in the UCC Office
- V. Communicating Effectively with a Supervisor
- VI. Team-Building
- VII. Putting New Skills to Work
- VIII. Listening Skills
- IX. Stress Reduction
- X. Delegating Work Responsibilities

XI. Dealing with “Problem Communicators”

XII. Establishing Procedures for Keeping Lines of Communication “Open”

XIII. Ways to Work Smarter, Not Harder

### Understanding This Material



Technical Assistants may sometimes feel that they serve many masters. The immediate Supervisor is an important one. It is helpful if that working relationship is a strong one, because the responsibilities of the UCC office require that the TA and the Supervisor work closely together.

This program is specifically tailored to address issues relating to effective professional interactions between TAs and the immediate Supervisor, who can be a Code Official, a Mayor, an Administrator, or a mentor.

### Learning Tips

- Define for yourself the quality of the interactions between you and your immediate Supervisor. How would you characterize it? Identify the strengths and weaknesses that each of you brings to the table.
- Make a list of each strength and each weakness you have identified. See if you can identify the “plusses” and “minuses” each of you brings individually, and then identify those interaction issues that erupt because the two of you are brought together because you work in the same place.
- Finally, drawing on the course material, identify steps to be taken to either strengthen, improve, or maintain the quality of your working relationship.
- If your immediate Supervisor is attending this course with you, take the time in the program to work toward consensus on ways the two of you can improve your communication. (Sometimes a public commitment to improve helps to motivate a reluctant participant to make adjustments later on.)



After completing this program, you should be able to:



- STRENGTHEN the relationship with your Supervisor
- OPEN the lines of communication
- CLARIFY your work responsibilities



- WRITE a thorough Job Description of your position
- IMPROVE office policies & procedures
- REDUCE job stress

**Test Your Knowledge!**



1. Describe the quality of your interactions with your supervisor.
2. What factors detract from the quality of your communication?
3. List steps that would improve your communication.
4. What steps should be taken to clarify your job responsibilities?







**Questions I need answered:**

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**NOTES:**



Program: Critical Thinking & Problem-Solving: Working with Other Professionals  
3 clock hours



### Course Outline

- I. Program Overview
- II. Common Problems associated with working in a UCC Office
  - A. Workload
  - B. Task Completion
  - C. Interruptions
  - D. Conflict
- III. Applying Critical Thinking & Problem-Solving Skills to the Office Setting
  - A. Identifying the Skills
  - B. Applying the skills to Office Problems
- IV. Identifying the Needs, Wants, Perspectives, And Agendas of
  - A. Code Officials
  - B. Governing Bodies, Politicians
  - C. Engineers & Architects
  - D. Contractors
  - E. Public-at-large
  - F. Business People
  - G. Attorneys
- V. Applying Critical Thinking & Problem-Solving Skills to working with Each Constituency

## VI. Looking at Problems from the perspective of Other Professionals

- A. Developing empathy for the roles of others
- B. Reconciling seemingly conflicting professional agendas
- C. Explaining the Codes to those unfamiliar with them
- D. Wearing one another's professional hats to look at problems

## VII. Identifying a Set of Critical Thinking & Problem-Solving Skills

- A. Careful observation
- B. Accurate record-keeping
- C. Clear expression of ideas
- D. Similarities & differences
- E. Avoiding faulty perceptions
- F. The role of assumptions
- G. Accurate Code interpretations
- H. The role of language in shaping perceptions/interpretations
- I. Reaching accurate conclusions based on "the facts"
- J. Logical vs. emotional thought

## VIII. Applying Critical Thinking Skills in the role of Technical Assistant

### Understanding This Material



Critical Thinking skills are often taught nowadays as a separate body of knowledge. These skills used to be learned as part of classroom learning – these skills were and are the glue by which we hold a knowledge infrastructure together.

Many times it is the ability to think critically that saves the day. Critical thinking involves the intersection of many abilities which surface at the same time to address or prevent problems.

Since the Technical Assistant must work with many professionals as well as the public-at-large, it is imperative that TAs be able to apply critical thinking skills as part of their administrative responsibilities. Note that this Certificate Program includes TWO problem-solving programs: one involving technical competencies, the other applicable to administrative interactions.

These are often two completely different sets of responsibilities. This program will look at the players as people who perform certain tasks. It will be the role of the TA to get all of those players on the same page, looking at the issues in (roughly) the same way, so that agreement can be reached in the most expeditious way possible.

Look upon this course as helping you “finesse” the working relationships of a group of professionals who do not always remember that their ultimate goals are similar if not the same.

**Learning Tips**

- Many factors affect the way in which professionals work together. You should know what those factors are and how they affect professional judgments.
- Your goal in this program is to strengthen your assessment skills to determine how well people are engaging in problem-solving together and to fix those interactions when they require it
- Critical thinking skills enable the parties to take a look at decision-making, interpretations of Codes and regulations, and the quality of interactions to see what motivates their choices. In this way it is hoped that awareness prompts positive change in the way the parties interact in the future. Keep all of this in mind as you work your way through the program.

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After completing this program, you should be able to:

- DEFINE a set of critical thinking skills to prevent and solve administrative problems



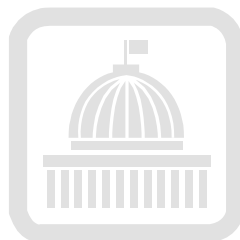
- COMMUNICATE more effectively with other professionals
- Show EMPATHY toward the viewpoints of others
- APPLY critical thinking skills to office problem-solving

- APPLY critical thinking skills in working with other professional constituencies to solve mutual problems

**Test Your Knowledge!**



1. Give some examples of critical thinking skills.
2. Explain how to apply these skills to interactions with others.
3. How can critical thinking skills be applied to an office setting?
4. Explain how empathy can help to resolve conflicts among construction professionals.









**Questions I need answered:**

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**NOTES:**



## DUTIES & RESPONSIBILITIES OF TECHNICAL ASSISTANTS



If you are not familiar with the job responsibilities of Technical Assistants in UCC offices, you may wish to review the publication, “Municipal Procedures Manual,” available through the Department of Community Affairs (DCA) of the State of New Jersey.

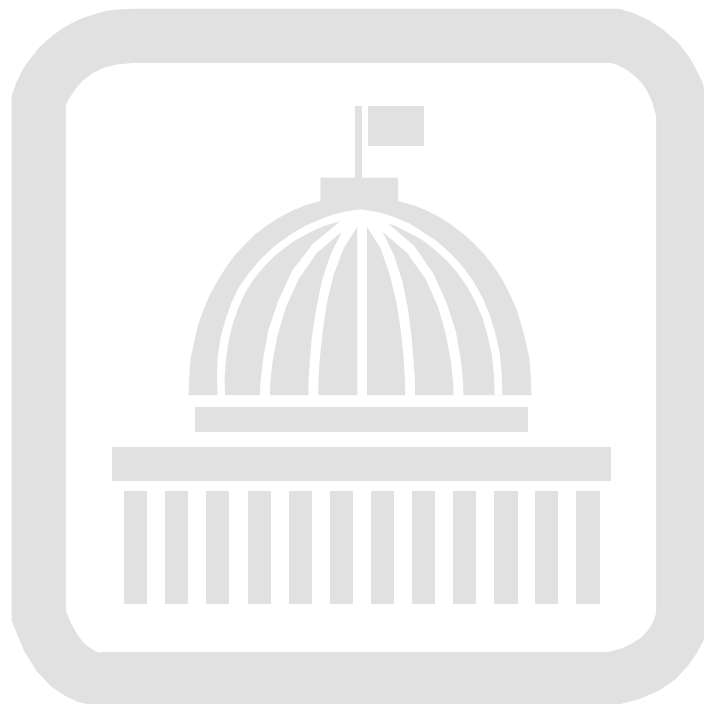
For your convenience, a listing of the primary Duties & Responsibilities of Technical Assistants is provided below:

- Handles Construction Permit Applications (including fee collections, obtaining prior approvals keeping document logs, monitoring of plan review deadlines, fee calculations, recording of permits)
- Reviews and files documents
- Handles inspection logs, updates files, keeps track of approvals, verifies type of Certificate required
- Handles Daily/Weekly Inspection Reports
- Maintains logs of Certificate issuance and fees
- Monitors Compliance due dates
- Monitors need to check for violations
- Responsible for End-of-Month Reporting
- Responsible for Town Report Preparation
- Responsible for State Reporting

(including new construction, alterations, demolition, fees collected for building, electrical, plumbing, fire protection, elevator, certificates)

- Handles State Training Quarterly Report  
(uses Permit Fee Logs to compute dollar amounts and total cubic volume of new construction and additions; also computes the total cost of residential and non-residential alterations)
- Handles the administrative process for cyclical inspections (elevator devices)
- Handles Notices, Orders, and Appeals; assists in the completion of an appeal to the Construction Board of Appeals
- Receives, reviews, and files decisions

(Please note that this listing is NOT inclusive of every action performed by Technical Assistants. It is meant to provide an overview of their duties and responsibilities. For thorough coverage, see the publication cited at the beginning of this section.)



... A Word about the Publication,



**“You Can Build It!”**

The publication “You Can Build It!” had its sixth printing in 1989. Produced by the Council of American Building Officials, of which the Building Officials and Code Administrators International (BOCA) is a member, it was designed for “self-helpers” and for those who wish to assist them with their construction needs.\*

The manual covers many issues and matters of importance to people like Technical Assistants – it provides a concise overview of highly relevant information.

“You Can Build It!” (or an equivalent reference) should be in the hands of every Technical Assistant. Publications of this type can readily bring a person “up to speed” with regard to construction considerations.

Below is a listing of the key topics found in this publication. These items provide a virtual “checklist” of the “basics,” and the topics listed here can be of great help to those who work in UCC offices – and to the instructors who teach them:

- Important initial Questions & Concerns  
(e.g., “Will my project add to the value of my home? Do I have the technical know-how? Am I prepared for the mess? Am I emotionally prepared for something to go wrong?”)
- Load- and non-load-bearing Walls
- Code Requirements, including deeds, zoning, local ordinances
- Creating Blueprints & Plans, including items you will need to create a proper set of drawings as required by a UCC office
- Sketches, Models, and Rules-of-Thumb

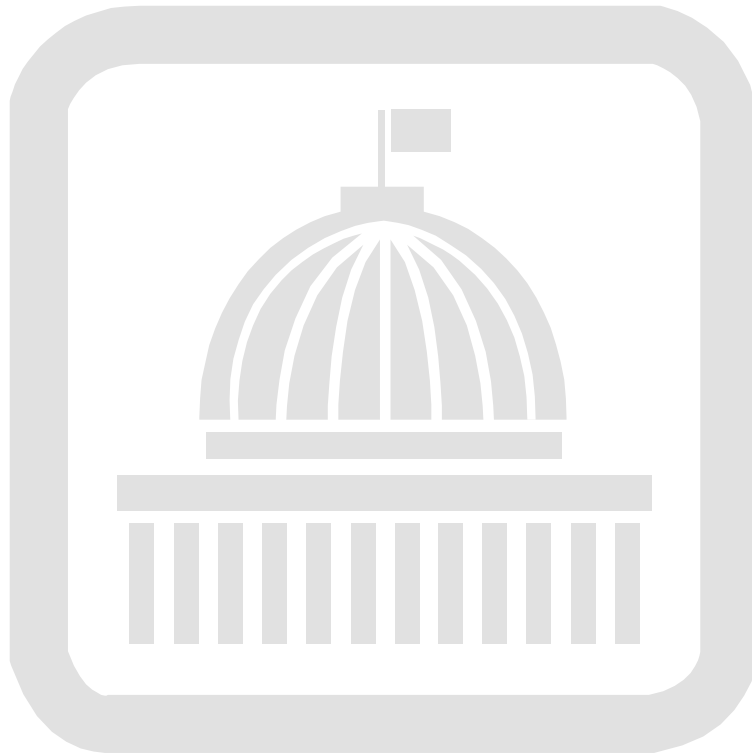
- Floor Plans and Elevations
- Estimating Costs & Materials Needed
- Doing Estimate Calculations
- Estimation Charts & Checklists
- How To Pay for Home Improvement Projects
- The Whys & Wherefores of Permits
- Sample Applications
- Finding the Right Contractor
- Materials & Site Preparation
- Inspections
- Safety Hints
- Windows, Insulation, Vapor Barriers
- Checklist of Zoning & Building Restrictions
- Glossary

\*The Preface to “You Can Build It!” contains the following statement:  
“Self-helpers are encouraged to reproduce any or all portions of this booklet for their own use.”

Visit the BOCA website at [www.bocai.org](http://www.bocai.org) for information on “You Can Build It!” and other text material suitable for use by both students and instructors in this Certificate Program.

For general questions, or information on useful course materials, you may wish to contact DCA's Division of Codes and Standards (the address can be found after the title page of this Manual), or BOCA, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795; (708) 799-2300

A BOCA Eastern Office is located at One Neshaminy Interplex, Suite 201, Trevoese, PA 19053; (215) 638-0554



## Internet Sources of Information



Instructors and students alike in the Certification Program for Technical Assistants will find useful information at the following web sites:

[www.bocai.org](http://www.bocai.org):

This is the web site for BOCA International (Building Officials and Code Administrators International). You will find a great deal of technical information on this web site; you can also order helpful publications from their shop-online link

[www.state.nj.us/dca](http://www.state.nj.us/dca)

This is the Home Page for the NJ Department of Community Affairs

[www.state.nj.us/dca/codes](http://www.state.nj.us/dca/codes)

This is the web site for DCA's Division of Codes and Standards. Here you will find a wealth of informative links to the site's many pages, including construction permit and application forms, adopted codes, elevator safety, building and housing regulation, and information about Division Programs

[www.eren.doe.gov](http://www.eren.doe.gov)

This site offers information about energy codes in NJ

Finally, to help you locate web sites with valuable information about construction-related topics, try using one of the best (free) search engines on the web: GOOGLE. You can reach it at [www.google.com](http://www.google.com)

Just type **construction codes-new jersey** to begin a search.

### Competencies Checklist for Technical Assistants





As courses are completed in this Certification Program for Technical Assistants, participants and their instructors should see clear evidence of the development of the following technical and administrative competencies:

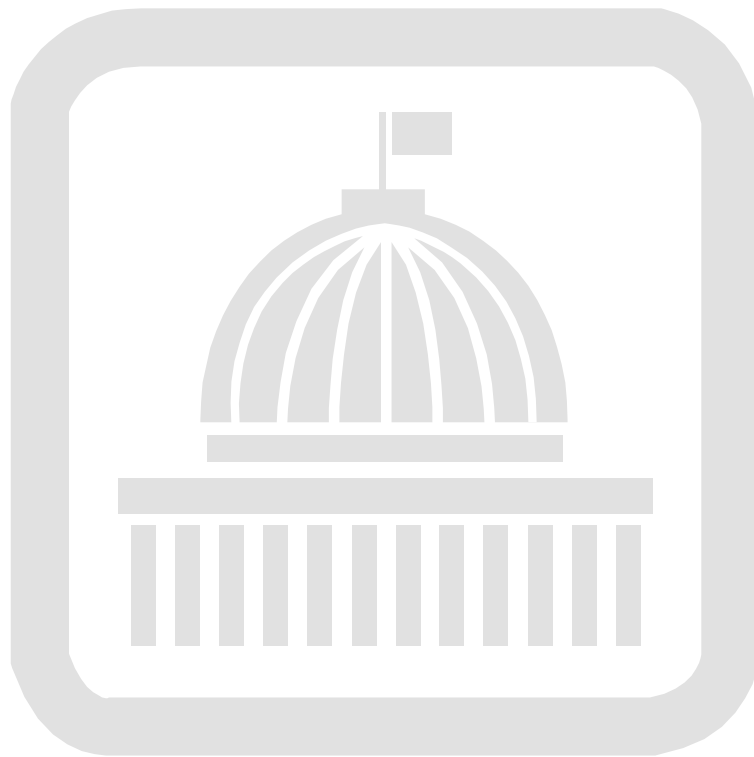
### **Technical Competencies**

- Describe the job duties and responsibilities of the Technical Assistant in the State of New Jersey
- Identify sources of technical information for use in the UCC office
- Be able to use a computer to access State information, transmit information, create and use templates, complete repetitive tasks, maintain financial records, maintain logs of permits, applications, certificates, and completed work
- Read blueprints and plans
- Create elementary blueprints when assisting residents
- Explain the components on the UCC Act
- Read and interpret Codes in at least a basic way
- Keep accurate records
- Understand and be able to explain municipal procedures
- Answer basic questions related to construction
- Explain the steps in a construction project, start to finish
- Identify a set of technical problem-solving skills
- Address technical problems using problem-solving strategies

### **Administrative Competencies**

- Describe the concept of Work Place Dynamics
- Be able to interact well with office staff
- Be able to interact well with other professionals
- Use time management skills for increased productivity
- Demonstrate delegation skills
- Identify strategies used in conflict resolution
- Resolve and prevent conflict
- Reduce job-related stress

- Identify strategies for effective interaction with a supervisor
- Identify a set of administrative critical thinking skills
- Be able to apply critical think skills to administrative problems



### **Loading the Power Point Slideshow CD/Diskettes**

The CD/Diskettes contain a slideshow for your use when taking courses in this program.

The slideshow consists of “slides” containing the suggested syllabus for every course in the program and ClipArt slides with animation and sound. The slideshow is a tool to reinforce learning, help you prepare in advance, and review information as needed.

The slideshow uses Power Point 2002. If you want to view the slideshow, you will need to use a desktop computer or a laptop

Even if your computer does not have Power Point, you will be able to view the slideshow because a viewer has been included on the CD/diskettes.

### **Loading the Slideshow into a computer**

1. Insert the floppy disk or CD.
2. In the case of the diskettes, go to My Computer, right-click on the A-drive icon, and click “open.”

(Similar steps will apply if you are loading from a CD.)

3. Double-click on “Pngsetup.” A dialog box will open, asking you to select the folder to which you want to copy the slideshow presentation. **Select an empty folder (you may need to create one) in which to store the slideshow. if you choose a destination with files in it, all of your files will be erased!**
4. After you have selected the destination location, the program will ask you to insert the additional diskettes, and then it will ask if you want to run the presentation.
5. To run the presentation at another time, click “no.” When to want to run it, go to the location to which you copied the presentation, right-click the presentation, and then click “Show” on the shortcut menu.
6. The “Show” command is not available if the destination computer does not have Microsoft PowerPoint or the Microsoft PowerPoint Viewer installed. If the “Show” command is not on the shortcut menu, open the presentation through the viewer. It has the filename ppview32 and is in the same folder as your presentation.

To load from a CD:

1. Insert the CD.
2. Right-click on the CD icon in your computer and click on open or explore, so that you can see the files on the CD.
3. Right click on the name of the slideshow you want to open. If the SHOW command appears, click on SHOW,
4. If the SHOW command does not appear in the drop-down short list, then you must view the slideshow through the Power Point viewer.
5. Right-click on the viewer to open it, and then click on the program you want to see.
6. The “Show” command is not available if the destination computer does not have Microsoft PowerPoint or the Microsoft PowerPoint Viewer installed. If the “Show” command is not on the shortcut menu, open the presentation through the viewer. It has the filename ppview32 and is in the same folder as your presentation.

If for some reason, you cannot view the presentation, you may wish to download a viewer directly to your computer from the Microsoft Office website.