

Pathway Assessment Blueprint

Construction



Test Code: 1128/ Version: 01

General Assessment Information

Blueprint Contents

General Assessment Information

Written Assessment Information

Sample Written Items

Specific Competencies Covered in the Test

Test Type: The Construction industry-based credential is included in NOCTI's Pathway assessment battery. Pathway assessments assess knowledge and skills at a broader level than the Job Ready assessments and focus on the Pathways established as part of the national career cluster model. Pathway assessments are delivered entirely online which allows NOCTI to include engaging interactive items.

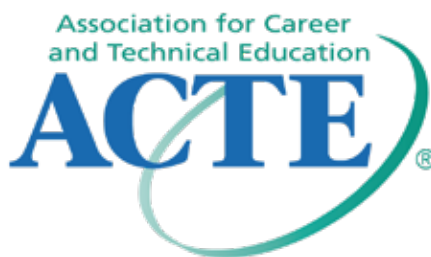
Revision Team: The assessment content is based on input from secondary, post-secondary, and business/industry representatives from the states of Colorado, Kentucky, New York, Oklahoma, Pennsylvania, Tennessee, and Virginia.



46.9999-Construction Trades, Other



Career Cluster 2-Architecture and Construction



The Association for Career and Technical Education (ACTE), the leading professional organization for career and technical educators, commends all students who participate in career and technical education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!



NATIONAL COLLEGE CREDIT RECOMMENDATION SERVICE
University of the State of New York - Regents Research Fund

In the lower division
baccalaureate/associate degree
category, 3 semester hours in
Construction or Applied Science.



INTERNATIONAL SIGN ASSOCIATION

www.signs.org

The International Sign Association (ISA) represents manufacturers, suppliers and users of on-premise signs and sign products from all 50 states and around the globe. The sign and visual communications industry is a \$37.5 billion business that employs more than 200,000 individuals. One of ISA's long term goals is to showcase and promote the many exciting and diverse career opportunities that exist within the sign and visual communications industry and to apprise students of the abundant employment opportunities that are present to skilled and qualified candidates. ISA strongly encourages and supports students that work to enhance their educational achievements by completing NOCTI assessments.

Written Assessment

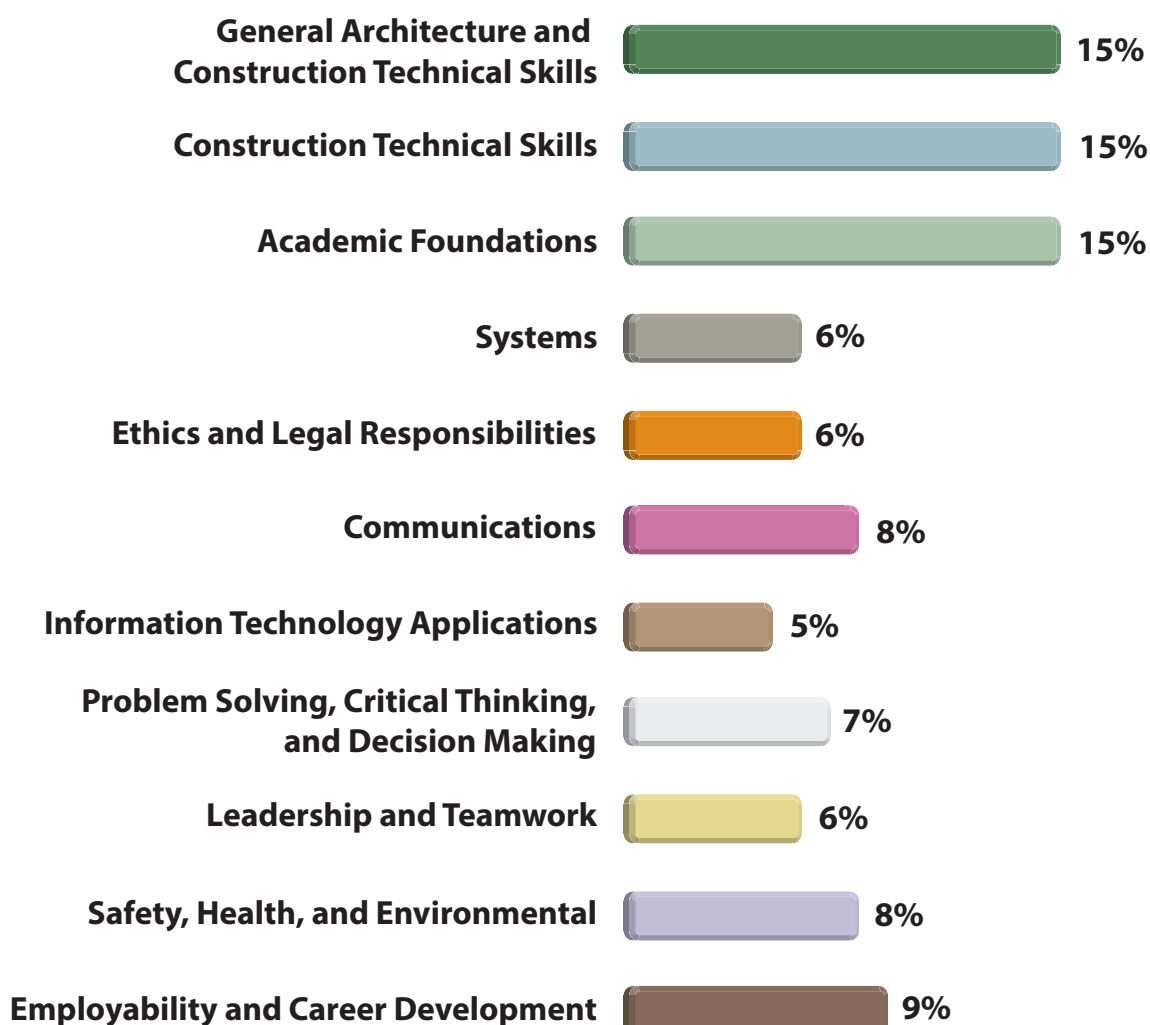
NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 2 hours

Number of Questions: 97

Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

General Architecture and Construction Technical Skills

- Create and implement project plans considering available resources and requirements
- Read and interpret blueprints and other technical drawings and documents
- Select and use tools, machinery, and equipment commonly used in design and construction

Construction Technical Skills

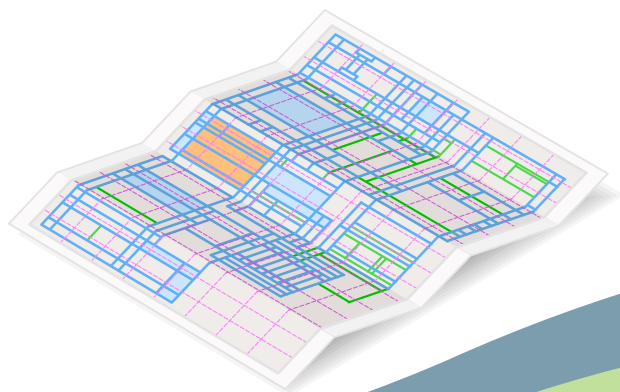
- Identify tools and materials needed to complete a construction project
- Demonstrate knowledge of craft and trade skills needed to complete construction projects effectively
- Understand and implement testing and inspection procedures to ensure the successful completion of a construction project

Academic Foundations

- Apply reading skills in an architecture and construction career environment
- Apply writing skills in an architecture and construction career environment
- Apply mathematical skills in an architecture and construction career environment
- Apply science skills in an architecture and construction career environment

Systems

- Examine the relationship of roles and responsibilities between trades/professions to complete a job or project
- Apply industry standards and practices to ensure quality work



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Please note, due to a shift in OSHA terminology, that any references to "Material Safety Data Sheets (MSDS)" will be changed to "Safety Data Sheets (SDS)" during the next scheduled revision.

Specific Standards and Competencies (continued)

Ethics and Legal Responsibilities

- Apply appropriate codes, laws, regulations, and industry standards to architectural and construction situations
- Identify ethical issues and demonstrate ethical behavior in architectural and construction situations

Communications

- Locate, organize, and reference written information from reliable sources to communicate with coworkers and clients
- Apply listening skills and interpret verbal and nonverbal behaviors to enhance communication with coworkers and clients
- Interpret and use tables, charts, and figures to support written and oral communication

Information Technology Applications

- Use word processing, presentation, and email applications to prepare communications
- Use spreadsheet and database applications to manage and communicate data and information

Problem Solving, Critical Thinking, and Decision Making

- Use problem solving and critical thinking skills to locate good sources of information about problems and determine appropriate methods for investigating causes
- Use problem solving and critical thinking skills to determine root causes of problems and suggest solutions

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Specific Standards and Competencies (continued)

Leadership and Teamwork

- Exhibit leadership qualities to improve the quality of work and the work environment
- Work effectively in a team environment to improve the quality of work and the work environment

Safety, Health, and Environmental

- Identify and practice appropriate safety and health procedures for architecture and construction occupations
- Demonstrate appropriate emergency and first aid knowledge and procedures for architecture and construction occupations
- Identify and practice appropriate environmental procedures for architecture and construction occupations

Employability and Career Development

- Demonstrate employability skills related to a career in architecture and construction
- Pursue career development skills to advance in architecture and construction careers



Sample Questions

The first step in any scientific experiment involves

- A. identification of the problem
- B. collection of the data
- C. preparation of a conclusion
- D. testing of the solution

An example of body language that conveys interest in what a speaker is saying is

- A. repeatedly gazing over the speaker's shoulder
- B. crossing your arms
- C. stifling a yawn
- D. leaning forward slightly in the chair

A reliable source of career information and networking is

- A. a professional/trade organization
- B. coworkers
- C. friends and family
- D. the Internet

One benefit of teamwork for employees is

- A. less responsibility
- B. higher pay
- C. greater work efficiency
- D. less training is required

Metal gauge (e.g., 20-gauge metal) refers to

- A. thickness
- B. length
- C. weight
- D. density

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Sample Questions (continued)

An email system is provided for employees by employers. The contents of electronic files on company equipment are legally considered property of the

- A. supervisor
- B. employee
- C. public
- D. employer

When composing a formal business email, avoid the use of

- A. abbreviations like LOL
- B. descriptive phrases
- C. exclamation points
- D. acronyms like OSHA

The moisture content in lumber needs to be measured because

- A. as moist lumber dries, it will contract
- B. moist lumber is more expensive
- C. the fasteners could rust on moist lumber
- D. moist lumber is easier to handle and store

The material best suited for footings is

- A. brick
- B. concrete
- C. stone
- D. concrete block

Gas lines are pressure tested with

- A. air
- B. water
- C. refrigerant
- D. natural gas

Notes