

# Massachusetts CTE Teacher Testing **Program Building & Property Maintenance Content Outline**

# Written and Performance Exam General Overview

- The intent of this exam is to assess the candidate's ability to teach the skills found in the Massachusetts Technical Education Framework.
- The written exam is a state-developed exam aligned to the frameworks which can be accessed here. The performance exam is a NOCTI-developed teacher test and has been determined by DESE to align to the state frameworks.
- Many questions and tasks require a synthesis of knowledge based on experience in the field and may not be found in any book.
- Use this exam outline and the Massachusetts Technical Education Framework to focus your preparation for the exams.
- Candidates are encouraged to prepare for their written exam by reviewing textbooks and reference material which have been listed as part of this exam outline. These resources can be found using online search tools, online vendors, and websites.

# Written Exam

Number of Questions: 100 Administration Time: 3 hours

Passing Score: 70.0%

Administration Method: Remote Proctoring Online Testing Session

Willien Exam Content Coverage	
9%	Building Alteration, Preparatory Painting and Repair of Wood Plaster, Concrete, or Brick
12%	Building Maintenance
11%	Building Repair Materials
5%	Energy Efficiency and Green Building Technology
10%	Heating, Ventilation, and Air Conditioning Troubleshooting
16%	Landscaping and Grounds Maintenance
6%	Building and Property Maintenance-Related Mathematics
5%	Painting and Finishing
3%	Record Keeping
7%	Safety

#### 5% Technical Drawings and Blueprints

#### 11% Tool and Equipment Use

# Written Exam Reference Materials (Reference Current Edition)

- Home Repair and Maintenance by Jack M. Landers (Goodheart-Willcox)
- Modern Carpentry by Willis H. Wagner (Goodheart-Willcox Co)
- Masonry Skills by R. T. Kreh, Sr. (Delmar Publishers)
- Basic Construction Blueprint Reading by Mark W. Huth (Delmar Publishers)
- Fundamentals Of Carpentry Tools, Materials And Practices by Walter Durbahn and Robert Putnam (Sterling Publication Company)
- Low Pressure Boilers by Frederick Steingross (American Technical Publishing)
- New Garden Book (Better Homes and Gardens)
- Horticulture Gardner's Desk Reference by Anne Moyer Halpin (John Wiley & Sons Inc)
- Garden Doctor (Better Homes and Gardens)
- Scotts Lawns: Your Guide To A Beautiful Yard by Nick Christmas and Ashton Ritchie (Meredith Books)
- American Horticultural Society Gardening Manual by American Horticulture Society (DK Publishing)
- Landscape Design, Construction and Maintenance by Ronald J. Biondo and Charles B. Schroeder (Pearson)
- Construction and Building Technology by Keith Blankenbaker (Goodheart-Willcox)

### Materials Needed for the Written Exam

- A four-function calculator is included in the online testing system. No other calculators are permitted.
- Scrap paper and pencil/pen are permitted.

# Written Exam Sample Items

Each question on the exam consists of one incomplete sentence or question followed by four choices. Some items reference an image or diagram. A few sample items are included below; the correct answer is designated with an asterisk (\*).

The size of a portable drill is determined by:

- a. horsepower of the motor.
- b. highest rpm capability.
- c. length of the drill body.
- d. capacity of the chuck. (\*)

The three numbers on a bag of fertilizer always represents:

- a. nitrogen, phosphate and potash in that order. (\*)
- b. nitrogen, lime and potash in that order.
- c. nitrogen, potash and phosphate in that order.
- d. potash, lime and nitrogen in that order.

# Performance Exam – COMING SOON!