

# Utility Industry Math Boot Camp for the CAST Battery

The *Construction And Skilled Trades* Selection System, *CAST*, is a battery of skill and ability tests designed and validated by the Edison Electric Institute, EEI, to aid in the selection of candidates across a wide variety of construction and skilled trades occupations. This test battery measures skills and abilities that are critical for effective job performance. There are four *CAST* tests: Graphic Arithmetic, Mathematical Usage, Mechanical Concepts, and Reading for Comprehension.

The **Utility Industry Math Boot Camp for the CAST Battery** was designed to help participants prepare for the CAST tests. Both Mathematics and Mechanical Concepts topics found in the CAST tests are specifically and thoroughly covered during the **Utility Industry Math Boot Camp for the CAST Battery**; preparation for the Reading for Comprehension test of the CAST happens indirectly: participants must do a considerable amount of reading-for-problem-solving on their own and in teams. Upon completion of the **Utility Industry Math Boot Camp for the CAST Battery**, hard-working, serious-minded individuals should expect to achieve high scores on the CAST tests. The recommended prerequisite for the **Utility Industry Math Boot Camp for the CAST Battery** is prior attendance at a Day of Remediation-Math.

# Utility Industry Math Boot Camp for the CAST Battery

The **Utility Industry Math Boot Camp for the CAST Battery** is available for a nominal annual licensing fee\* and includes the following:

## 1. Student Materials

- Course Syllabus
- Mathematics Manual (334 pages)
- How to "Read" a Ruler Workbook (48 pages)
- How to "Read" and Use an Architect's Scale Manual (52 pages)
- Introduction to Spatial Reasoning Workbook (100 pages) **NEW!**

## 2. Instructor Materials

- Instructor's Guide (67 pages)  
(Learning Objectives, Daily Lesson Plans and Materials Checklists)
- PowerPoint Presentations (synchronized with the Instructor's Guide and Mathematics Manual)
  - √ Boot Camp Overview/Train-the-Instructor
  - √ Orientation Session
  - √ Course Lessons (Days 1 – 5)
- Miscellaneous Assessments with Answer Keys, Scoring Guides, and Gradebook
  - √ Pre- and Post-Course Skills Assessments
  - √ Quizzes:
    - Ruler
    - Times Tables
    - Perfect Squares and Square Roots
    - Common Fractions Expressed as Decimals and Percents
    - Metric Prefixes
    - Properties of Exponents **NEW!**
    - Formulæ
    - Mechanical Comprehension
- CAST Practice Tests
  - √ Graphic Arithmetic
  - √ Mathematical Usage
- Student Agreement
- Student Satisfaction Questionnaire
- Certificate of Completion templates

## 3. Technical Assistance and Support from Helicon, Inc.

For more information about the  
**Utility Industry Math Boot Camp for the CAST Battery**

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\***All** revenues are used to support Helicon, Inc.'s classroom activities in New York City.