

ATPD-1330: PRINT READING FOR PILE DRIVING

Cuyahoga Community College

Viewing: ATPD-1330 : Print Reading for Pile Driving

Board of Trustees:

September 2025

Academic Term:

Fall 2025

Subject Code

ATPD - Applied Ind Tech-Pile Driving

Course Number:

1330

Title:

Print Reading for Pile Driving

Catalog Description:

Introduction to blue print reading as it pertains to the Pile Driver. In depth discussion on line types, scale, views, and revision information. Use of optical tooling for layout also included.

Credit Hour(s):

2

Lecture Hour(s):

2

Requisites

Prerequisite and Corequisite

ATCT-1301 Introduction to Carpentry, and departmental approval: admission to Pile Driving Technology apprenticeship program.

Outcomes

Course Outcome(s):

Interpret symbols and view on sets of pile blueprints and use optical tooling layout to complete pile configuration.

Objective(s):

1. Review process and professions involved in piledriving.
2. Interpret a set of pile drawings.
3. Use optical tooling layout said pile configuration.
4. Identify views and symbols on a blueprint.

Methods of Evaluation:

1. Quizzes
2. Exams
3. Classroom participation
4. Completion of assigned projects

Course Content Outline:

1. Concepts
 - a. Theory of Plans
 - i. Architectural and engineering language
 - ii. Architectural drawing and graphics
 - b. Hierarchy of construction process
 - c. Types of working drawings; piledriving views

- i. Architectural
 - ii. Structural
 - iii. Electrical
 - iv. Mechanical
 - v. Shop
 - vi. As-built
 - vii. Role of designer
 - d. Types of specifications
 - i. Performance
 - ii. Descriptive
 - iii. Reference
 - iv. Proprietary
 - v. Base-bid
 - e. Theory of symbols and abbreviations
 - f. Symbols and terms
 - i. Architectural
 - ii. Mechanical
 - iii. Electrical
 - iv. Welding
 - v. CalTrans
 - vi. Geometric shapes
 - vii. Organizations
 - viii. Abbreviations
2. Skills
- a. Preparing job by following construction process of hierarchy and design of project.
 - b. Reading contract documents including specifications, general conditions, special conditions, and owner-contractor agreement.
 - c. Reading working drawings including rendering, scope and scale.
 - d. Interpreting working drawings.
 - e. Preparing CSI format and article specifications.
 - f. Visualizing plans including multi-view, three-view, plans and elevations, hidden surfaces, and sections.
 - g. Interpreting auxiliary drawings, drawing conventions, and symbols.
 - h. Practicing sketching and drawing.
 - i. Practicing using instruments.
 - j. Planning interpretation using pile plans, Hovercraft dock and pier, and municipal pier.
 - k. Using layout instruments including level transit, plumbobs, tripods, and engineering rods.
 - l. Using layout tricks with simple layout tools, geometry, and chalk lines.
3. Issues
- a. Contract documents

The Course Schedule is subject to change due to pedagogical needs, instructor discretion, parts of term, and unexpected events.

Resources for the Instructor

Basaraba, Bruce. *Industry Trends Training Manual*. First ed. Alberta, Canada: IPT Publishing, 1998.

Cubic Precision. *Optical Alignment Manual*. First ed. San Diego, CA: Cubic Precision, 1986.

Garley, Ron. *Metal Trades & Welding Training Manual*. Alberta, Canada: IPT Publishing, 2007.

United Brotherhood of Carpenters. *Instructional Material for BluePrint Reading*. First ed. Northern CA: United Brotherhood of Carpenters, 1972.

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