COURSE SYLLABUS

Blueprint Reading & Construction Estimating Course (Self-Paced)

Build a solid foundation in blueprint reading and construction cost estimating across residential and commercial projects. You'll learn to interpret construction documents and develop cost estimates for everything from single-family homes to mixed-use commercial buildings.

> Group classes (Live Online) and onsite training are available for this course. For more information, email corporate@nobledesktop.com or visit: https://www.nobledesktop.com/classes/blueprint-reading-estimating-fundamentals-bundle



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Course Outline

This package includes these courses

- Blueprint Reading Course - Residential Construction (Self-Paced) (10 Hours)
- Blueprint Reading Course - Commercial Construction (Self-Paced) (20 Hours)
- Intro to Construction Estimating Course (Self-Paced) (20 Hours)
- Construction Estimating with Bluebeam Course (Self-Paced) (30 Hours)
- Construction Materials Course (Self-Paced) (30 Hours)
- MEP Blueprint Reading (Self-Paced) (20 Hours)
- Structural Blueprint Reading (Self-Paced) (20 Hours)

Attend our AI Construction Estimating with Togal.AI Course as a free elective (optional).

AI Construction Estimating with Togal.AI Course (Self-Paced)

Blueprint Reading Course - Residential Construction (Self-Paced)

Learn how to read and interpret residential construction blueprints from a licensed architect. This online course covers drawing types, scale, and the relationships between drawings using a real-world project as reference.

- Understand the inter-relationship between drawings included in a full set of construction documents.
- Analyze how scale is presented and applied across different drawing types.
- Evaluate the similarities and consistencies found across blueprint sets submitted for building permits.
- Recognize the importance of consistent information presentation across all types of construction documents.

Blueprint Reading Course - Commercial Construction (Self-Paced)

This is an online blueprint reading course for commercial projects. Learn from a licensed architect how to read blueprint

drawings for a mixed-use commercial project that includes hotel, retail, and parking.

- Demonstrate an understanding of the inter-relationship between the drawings included in a set of construction documents (blueprints) for a mixed-use commercial project.
- Analyze different drawings and see how information is referenced throughout a set of construction documents.
- Evaluate the similarities between all sets of construction documents submitted for building permits.
- Recognize the need for consistency in presenting information in all types of construction documents.
- Gain experience understanding how 3D model presentations within a set of construction documents make it easier to understand the project.

Intro to Construction Estimating Course (Self-Paced)

This online construction estimator course is taught by a professional construction estimator. You will learn about the types of estimates and how an estimate is organized. The components and sub-components of an estimate will be addressed – you will learn how to become an estimator.

- Demonstrate an understanding of the inter-relationship between the construction drawings and a quantity-takeoff cost estimate.
- Analyze the components of a construction cost estimate and learn how a quantity-takeoff cost estimate is created.
- Master an understanding of quantity surveying, estimating takeoffs and pricing estimated quantities.
- Recognize the need for thoroughness and attention to detail when preparing construction cost estimates.

Construction Estimating with Bluebeam Course (Self-Paced)

This Bluebeam Estimating course teaches construction professionals how to perform accurate digital takeoffs and organize estimating data efficiently. Designed for contractors and estimators, the course focuses on using Bluebeam Revu to generate quantity reports, streamline estimating workflows, and prepare data for project proposals.

- Develop a strong foundation in digital estimating, including takeoffs, quantities, and bid preparation using Bluebeam Revu
- Use measurement, markup, and dynamic fill tools to calculate quantities across common building systems such as walls, windows, flooring, and roofing
- Organize estimating data with tool chests, layers, spaces, and custom columns, then export clean, editable quantity reports
- Apply skills to real construction drawings through structured exercises that reflect professional estimating workflows

Construction Materials Course (Self-Paced)

This course offers a practical overview of the materials and systems used in residential and commercial construction, from concrete foundations through roofing systems. You'll examine how core materials are used, their key properties, and sustainability considerations to support informed decision-making on construction projects.

- Understand the properties and applications of core construction materials, including concrete, steel, and wood
- Explore sustainable and innovative materials used in modern construction
- Learn how to evaluate and select materials based on project requirements
- Apply material knowledge to both residential and commercial construction scenarios
- Assess material performance, durability, and cost considerations
- Identify industry trends and best practices in material selection and use

MEP Blueprint Reading (Self-Paced)

This course provides a thorough introduction to reading and interpreting mechanical, electrical, and plumbing (MEP) blueprints. You'll gain the skills to confidently work through HVAC layouts, power and lighting plans, and plumbing schematics used in construction documents. In this course, you'll learn the following:

- Build a solid foundation in reading and understanding MEP blueprints
- Recognize and evaluate key elements within HVAC, electrical, and plumbing systems
- Apply blueprint reading skills to real-world construction scenarios
- Accurately interpret symbols, scales, and detailed technical drawings
- Strengthen your ability to collaborate with design and construction teams using MEP documents
- Review practical strategies for resolving common blueprint interpretation challenges

Structural Blueprint Reading (Self-Paced)

This course centers on developing the ability to read and interpret structural blueprints used in professional construction settings. You'll begin by building a clear understanding of structural assemblies and why knowing how to read structural drawings is critical to successful construction projects.

- Interpret structural blueprints and understand how they guide construction projects
- Read and apply General Notes and Inspection Requirements within structural drawings
- Identify and evaluate foundation plans, footings, and slab-on-grade details
- Recognize common symbols and abbreviations for concrete, rebar, and structural steel
- Review steel beams, joists, metal decking, and related structural assemblies
- Analyze structural details and sections, including weld symbols, bolt schedules, and rebar placement