COURSE SYLLABUS

Blueprint Reading Certification Course Online

Learn to read and interpret construction blueprints across residential, commercial, MEP, and structural projects, all in one online program. With hands-on training, real-world drawings, and live support from expert instructors at an accredited institution, you will gain the confidence to navigate a full set of construction documents and put that skill to work in the field.

Group classes (Live Online) and onsite training are available for this course. For more information, email partnerships@vdci.edu or visit: https://vdci.edu/certificates/blueprint-reading-certification-course-online



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Course Outline

This package includes these courses

- Residential Blueprint Reading Course Online (10 Hours)
- Commercial Blueprint Reading Course Online (20 Hours)
- MEP Blueprint Reading Course Online (20 Hours)
- Structural Blueprint Reading Course Online (20 Hours)

Residential Blueprint Reading Course Online

Taught by a licensed architect, this course is designed to provide you with a thorough understanding of how to interpret and analyze residential construction blueprints. This comprehensive, instructor-led course is ideal for beginners looking to gain essential skills, as well as for seasoned professionals seeking to improve their ability to collaborate on residential projects.

- Demonstrate an understanding of the inter-relationship between the drawings included in a set of Construction Documents (blueprints).
- Analyze different drawings and see how scale is presented throughout a set of Construction Documents.
- Evaluate the similarities between all sets of blueprint construction documents submitted for building permits.
- Recognize the need for consistency in presenting information in all types of Construction Documents in this online blueprint reading course.

Commercial Blueprint Reading Course Online

Learn to interpret and analyze commercial construction blueprints in this class taught by a licensed architect. Designed for construction professionals and students, this course focuses on mixed-use commercial projects, including hotel, retail, and parking structures. You'll develop skills to read architectural, structural, mechanical, and electrical plans.

- Gain a comprehensive understanding of architectural, structural, mechanical, and electrical plans as applied to a mixed-use commercial

construction project.

- Learn to read and interpret symbols, notations, and technical details in accordance with industry standards. Evaluate the similarities between all sets of construction documents submitted for building permits.
- Work with real-world construction drawings and documents to build practical skills.
- Understand how blueprints are used to estimate costs, plan projects, and ensure on-site accuracy during construction.

MEP Blueprint Reading Course Online

This is a comprehensive introduction to understanding and interpreting mechanical, electrical, and plumbing (MEP) blueprints. This course equips you with the skills to confidently navigate MEP plans, including HVAC systems, power and lighting layouts, and plumbing schematics. You will learn the following:

- Understand the fundamentals of reading and interpreting MEP blueprints
- Identify and analyze key components in HVAC, electrical, and plumbing systems
- Learn how to apply blueprint knowledge to real-world construction projects
- Develop skills to accurately interpret symbols, scales, and technical drawings
- Gain confidence in collaborating with design and construction teams using MEP plans
- Explore troubleshooting techniques for common challenges in blueprint interpretation

Structural Blueprint Reading Course Online

This course focuses on teaching students how to read and interpret structural blueprints used in professional construction environments. Students begin by building a strong foundation in structural assemblies and understanding why structural blueprint reading is essential to construction projects.

- Interpret structural blueprints and understand their role in construction projects
- Read and apply General Notes and Inspection Requirements in structural plans
- Identify and interpret foundations, footings, and slab-on-grade information
- Recognize symbols and abbreviations related to concrete, rebar, and structural steel
- Interpret steel beams, steel joists, metal decking, and associated assemblies
- Analyze structural details and sections, including weld symbols, bolt schedules, and rebar layouts