COURSE SYLLABUS

MEP Course Online

This program combines two essential courses to provide a complete introduction to Mechanical, Electrical, and Plumbing (MEP) systems and blueprint interpretation. This package is designed for students and professionals who want to understand how building systems function and how those systems are documented in construction drawings.

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



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Course Outline

This package includes these courses

- Fundamentals of MEP for Buildings Course Online (20 Hours)
- MEP Blueprint Reading Course Online (20 Hours)

Fundamentals of MEP for Buildings Course Online

Understanding MEP systems is a critical foundation for construction and design projects and is the focus of the fifth course in the Construction Fundamentals series. This course introduces the essential principles of Mechanical, Electrical, and Plumbing systems that support building performance, efficiency, and safety, including HVAC systems and controls, thermal comfort, indoor air quality, and plumbing for domestic water.

- Discover the fundamentals of HVAC (Heating, Ventilation, and Air Conditioning) and how these mechanical systems contribute to occupant comfort and building performance.
- Explore the components of building electrical systems, including power distribution, lighting, and low-voltage systems such as AV, telecom, and data.
- Learn the principles of plumbing systems, including water supply, drainage, and waste systems, and their role in maintaining hygiene and safety in buildings.
- Understand how MEP systems integrate within a project and the importance of designing them for efficiency, sustainability, and cost-effectiveness

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