

eQuest Training

Welcome to our eQuest course, which walks you through basic wizards to advanced topics with lots of demos within eQUEST.

Earn 10 GBCI CE Credits and PDHs.



This course gives you a well rounded knowledge of eQUEST. It starts with basic concepts in eQUEST and energy modeling and works through intermediate and advanced topics. The course goes in-depth into all the eQUEST wizards and then moves on to a variety of advanced topics like daylighting, fan curves and ASHRAE Standard 90.1 modeling.

Introduction to eQuest

In this introduction, the basic operating sequences, file types, and program types are discussed regarding the energy analysis and design program eQUEST. Included are user flow charts for basic user operation.

- Which eQuest wizard should I use?
- Important File Types in eQuest
- Quiz

eQuest Schematic Design Wizard

In this lesson, we create a new project using the Schematic Design wizard. We'll walk through the parameters for each screen required for a new project

- Quiz

eQuest Design Development Wizard

After becoming familiar with the schematic design wizard, the next step is to become familiar with the design development wizard, which takes it up a notch. We'll cover similarities and differences between the SD wizard and

Details



Unlimited
Online Access



Watch in-depth
Video Instruction
on your own time



Earn LEED CE Hours &
PDHs



For: Auditors, LEED,
Architects,
Materials & Equipment
Sales,
Engineers, Building
Professionals

walkthrough the parameters for each screen.

- Quiz

eQuest Energy Efficiency Measure Wizard

This video shows how the EEM Wizard is implemented in eQuest. Any file that's been completed in the SD or DD can be used in the EEM wizard. To launch the EEM wizard, in any file that you've finished with either of the other wizards, click the button on the actions tab.

- Using the EEM Wizard
- Simplify Daylighting Run
- Comparing Glass Types
- Standard Reports
- Quiz on Topics covered in previous video

Detailed Interface Basics in eQuest

Upon completion of the schematic design or the design development wizard, users will be directed to the detailed interface. The eQUEST detailed interface is very powerful, but as a result, it can be a little confusing. This video gives you a overview of the modules in the detailed interface.

- Quiz

Importing a CAD file in eQuest

Importing a CAD file in eQUEST is done quite easily with the right knowledge. It can be done in either the schematic design wizard, or the design development wizard. In this case we're on the wizard's screen 3 of the schematic design wizard, looking at the building footprint.

- Trace a simple CAD file and import into eQuest
- Set up custom zones from a CAD file
- Quiz

eQUEST Custom Electric Rates

This video covers creation of a basic electric rate in eQuest, as well as how to save an electric rate that was edited in the

detailed viewer by copying data from the .inp file.

- Custom Rates in the Wizards
- Cumulative vs Incremental
- Ratchets in the detailed view
- Saving a detailed rate from the .inp file
- Quiz

eQuest Online-- Intermediate Training

Now that we are familiar with the wizards, this section of the training covers the specifics of modeling in the categories listed below. These are all demonstrated within the wizards, keeping the application quick, easy, and simple. Remember, it is almost always best to try to model these parameters in the wizard first!

eQuest Building Shells and Heat Transfer Surfaces

The building shell contains the most screens of any particular function in the wizards and is the typical starting point. At first, the shell is considered as a single whole object. It requires a number of inputs.

Space Loads, Building Profiles, and Additional Shells in eQuest

Many users would be glad to know that setting up the building envelope, heat transfer surfaces, and light transfer areas completed a building. However, the building operation is equally as important, or even more important than the building envelope.

- Quiz

eQuest System Types

Equipment Setup in eQuest

- Quiz

Multiple Plants in eQuest DD Wizard

eQuest Zone Groups

eQuest EEM Wizard Compliance

Reports and Summary Results in eQuest

- Quiz

eQuest Detailed Interface

Now that we have discussed many topics when using the wizards, let's discuss going into greater details using the detailed interface.

Creating Items in eQuest Detailed Interface

After completing all possible inputs in the wizards, the user must enter detailed mode to complete any remaining inputs. While users could skip straight to detailed mode, most beginning to intermediate users and most advanced users will agree that the wizards should be utilized to their maximum.

- Creating, Copying, Linking
- Creating from scratch
- Link to an existing component
- Copying an existing component

Creating Constructions in eQuest

- Quiz

Deleting Components in eQuest

After hitting delete, the simplicity ends, and it is important to understand the implications of deleting a component, as many components in eQUEST are inter-related.

- Child Components
- Linked Components
- Keyword Assignments

Setting Up User Defaults in eQuest

Assigning Rooms, Zones and Systems

Schedules in eQuest Detailed Mode

- Quiz

Shading in eQuest

- Quiz

Setting Up Photovoltaics in eQuest

Parametrics Runs in eQuest

Setting Up Global Parameters in eQuest

- Quiz

eQuest Final Exam

Advanced eQuest Course

Make Up Air in eQuest

In this video we model a dedicated outside air system in eQUEST (DOAS which is also called a make-up air unit) and

add dedicated outdoor air to the rest of the systems in the project. We also show how to control the supply temperature of the 100% outside air unit.

Energy Recovery Wheel in eQuest

In this video, we add a sensible heat exchanger to the dedicated outside air system in the previous lesson. This is often called an ERV in eQUEST.

We also cover the defaults control methods for the energy wheel and explain what to do in the case where there is an airside economizer alongside the energy recovery device.

Global Parameters Sample

Daylighting in eQuest

In this lesson, we model daylighting in an existing file and show the quickest and most effective way to add daylighting to a model. We also show how to quickly disable/enable daylighting.

Importing a Fan Curve into eQuest

In this video, we export part of one model and import into another eQUEST model. The fan curve created in the previous lesson is exported and then imported into a new LEED baseline file. Included for subscribers: download the import file and get the 90.1-2007 VAV fan curve for LEED.

Modeling 90.1 VAV Fan for LEED in eQuest

In this video, we add and implement the specified 90.1-2007 VAV fan for a LEED baseline building. This can be translated to any other fan curve that one has the specifications on.

Load Extractor