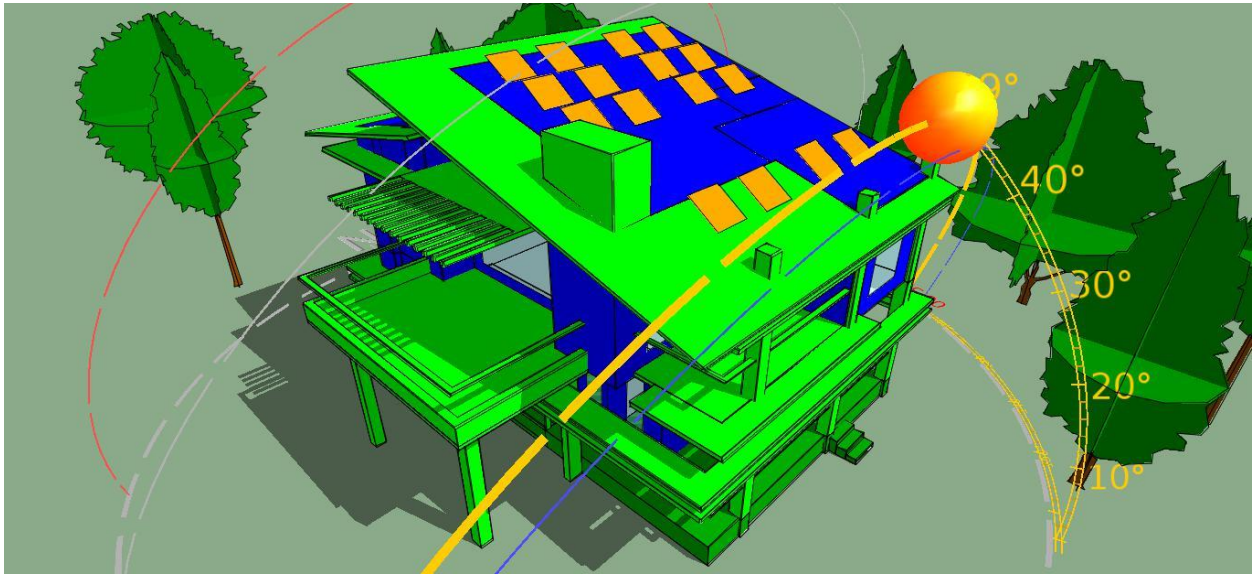


Course code: RDT-A002



IES VE 2 days Advanced training program

(Duration: 2 Days 9am to 5pm)

For Registration contact: **Aniket Chaudhari** Mobile: +91 9820941094 Email id: aniket@reindt.com

This is a 2 days special advance training course in IES VE software. We will teach you simulation techniques and methods to enable more sustainable design practices using the enhanced features of VE software. Attendees of the course will receive 60 days trial IES license to practice & get hands on experience. This is the certificate course, after successfully completing the course attendee will get the certificate from IES

Prerequisite: Candidate must have completed VE basic training or should have relevant experience of using VE software

Day 1

Part 1: Fast geometry creation methods, importing geometry from Sketch-up and Revit in VE

- Avoid time spent on modeling in VE and use experts techniques for fast geometry creation
- Tips and tricks for fast floor to floor modeling, zones, grouping, glazing, shading geometry and many more
- How to quickly create ceiling voids, unconditioned space, services shafts, lifts, staircase running throughout building, basement spaces etc.
- How to fix the errors, model checking, surfaces rectification, fixing run time error etc.
- Complex design form modeling, importing DXF, Sketch-up and Revit model in VE and efficient way to work with these techniques.

Part 2: Day-lighting, Artificial lighting & Radiance simulation in detail

- Day light analysis for complex design, shading analysis for customized fins, pergolas and solar shades. Changing properties of surface materials such as reflectance, VLT for glazing and make comparative analysis of different design decision based on results generated at early design stage
- Artificial lighting placement and editing, review properties of each luminaire before placing in room, check lighting levels with different combination and number of light fixtures
- Glare analysis, lux level, daylight factor, building external and internal detail lighting analysis using RadianceES tool. Changing surface material, colour, reflectivity of different surface like walls, floor, ceiling etc for accurate design case analysis is possible in this module.

Day 2

Part 3: MacroFlo for natural ventilation analysis

- In this module, we will create detail natural ventilation analysis for a building with specific weather file
- We will create all the different types of openings for our model and assign all the detailed properties for each window based on its opening type, % opening, exposure to wind etc.
- We can see inflow and outflow % of wind after running simulation and based on that we can make changes in design, opening size as required for efficient natural ventilation.

Part 4: Running dynamic thermal simulation using ApacheSim

- Introduction to detailed ApacheSim, tabular building template manager & setting up weekly and annual profiles using APpro
- Setting up apache systems using the apache systems dialogue
- Creating thermal templates, Setting up constructions using APcdb
- Apply thermal template to selected rooms, modifying thermal data for single room, modifying constructions for single room and individual elements, input data visualize viewer

- Editing multiple adjacencies, setting fuel carbon emission data, defining renewable, setting location and weather data, setting simulation options & running the dynamic simulation

Part 5: VistaPro for result analysis from dynamic simulation

- Introduction to VistaPro, Selecting the result file and required category
- Viewing graph of room conditions, synopsis of room condition, performing range test
- Viewing the energy consumption, CO2 emission of whole building, generating the summary report
- Comparing results from different simulations

Part 6: ApacheHVAC

- Introduction to ApacheHVAC module and user interface
- ApacheHVAC Tools, introduction to creating heating and cooling sources
- Introduction to controls