



## Using ClimateStudio for Daylight and Energy Analysis

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### Workshop Information

Format	Half-day (3 hours)
Maximum number of participants	35
Participants	Workshop is open to outside participants
Session format	Software tutorial followed by an interactive learning session

### Workshop Abstract

In this workshop, participants will learn to use [ClimateStudio](#) for analyzing the daylight and thermal performance of buildings. ClimateStudio is a new tool from Solemma that vastly improves the speed of daylight calculations and the accessibility of thermal analysis. Its simulation workflows help designers and consultants optimize buildings for energy efficiency, daylight access, electric lighting performance, visual and thermal comfort, and other measures of occupant health. ClimateStudio is a plugin for Rhinoceros 3D and Grasshopper 3D, is free for teaching and research, and is also available for commercial use.

The workshop will be split into two portions. In the first (approximately 120 minutes), the instructors will give a detailed overview of daylight, electric lighting, and thermal analysis workflows using ClimateStudio. Participants will learn to undertake annual climate-based daylight analysis for visual comfort, electric lighting independence, and LEED compliance meeting the IES LM-83 standard with dynamic shades. The analysis of electric lighting and physically-based renderings for visual quality and glare will also be demonstrated. Thermal simulations for energy use intensity and thermal comfort analysis will be briefly demonstrated. Grasshopper workflows will be briefly demonstrated in addition.

In the second part of the workshop (approximately 60 minutes), advanced participants will have the opportunity to undertake a design and simulation task using ClimateStudio. Participants with less background in Rhinoceros 3D can participate in a crowdsourced energy and daylight simulation game.

