

Important: This is not a lighting fundamentals or lighting design course. We assume that the attendee has a basic understanding of lighting design principles as well as lighting terminology (lumen, candela, intensity, illuminance, luminance, footcandle, lux, etc.) and a basic understanding of luminaire photometry.

## AGi32 INTRODUCTORY TRAINING CLASS OUTLINE\*

\*This class is taught both live and online.

- I. Introductions
- II. Getting Comfortable AGi32 Interface and Settings
  - A. Understanding the AGi32 Interface: so you can find what you need
  - B. Adjusting system Settings: making it just right for your use
- III. What are the 5 Steps to Success?
  - A. Step 1 Develop a Frame of Reference
    - 1. Draw Simple Line Data in AGi32
    - 2. Import 2D CAD Background
    - 3. Create a 3D Environment from a 2D File Using AGi32
    - 4. Explore Room Tools
    - 5. Dynamic Editing
    - 6. The Difference Between Rooms and Objects
    - 7. Import 3D CAD Drawing or Object
    - 8. Moving Objects
    - 9. Importing More Robust Content
    - 10. Importing Google Earth Background Images into AGi32
  - B. Step 2 Place Calculation Grids
    - 1. Direct Lighting Calculations
    - 2. 2-Point Grid
    - 3. 3-Point Grid
    - 4. Polygon Grid
    - 5. Remove Unwanted Points
    - 6. Points on a Line
    - 7. Full Radiosity Calculations
    - 8. Create a Room with Calculation Points Inside
    - 9. Adding Points to an Existing Room
  - C. Step 3 Define and Place Luminaires
    - 1. Obtain Luminaire Photometry
      - a. Select File
      - b. Find File
      - c. Instabase
    - 2. Define Luminaires
      - a. Interior Luminaires
      - b. Exterior Luminaires

- 3. Locate Luminaires
  - a. Locate
  - b. Locate & Orient
  - c. Locate & Aim
- 4. The Photometric Web Indicator
- 5. Using Arrays
  - a. Rectangular Array
  - b. Polar Array
- 6. Mirroring Luminaires
  - a. Static Mirror
  - b. Parametric Mirror
- 7. Modify Luminaire Locations
  - a. Re-Aim
  - b. Move
  - c. Copy
  - d. Delete
  - e. Edit
- 8. Place Luminaires with Design Isolines Enabled
- D. Step 4 Evaluate the Design
  - 1. Calculate with Direct-Only Method
  - 2. Calculate with Full Radiosity Method
  - 3. Isolines
  - 4. Highlighted Values
  - 5. Render Mode
- E. Step 5 Presentation
  - 1. Create a Walk-Through
  - 2. Exporting a Viewpoint in JPG Format
  - 3. Ray Traced Rendering
  - 4. WYSIWYG in Model Mode
  - 5. Exporting to CAD
  - 6. Page Builder Reports
- IV. Applying the Five Steps Through Example
  - A. Basic Lighting Luminaires & Points
    - 1. Step 1 Establish the Frame of Reference Using a Google Earth Image
    - 2. Step 2 Place Calculation Points
    - 3. Step 3 Define and Place Luminaires
      - a. Using Design Isolines to aid in luminaire location
    - 4. Step 4 Evaluate the Design
      - a. Find Calculated Values
      - b. Isolines
    - 5. Step 5 Presentation
      - a. Luminaire Labels
      - b. Schedules
      - c. Create a Model Mode Title Block
  - B. Site Lighting (a more complicated example)
    - 1. Import CAD Background, Create Building Object
    - 2. Place Calculation Points, Remove Points Under Building
    - 3. Define Luminaires
    - 4. Place Luminaires
    - 5. Evaluate the Design

- 6. Render
  - a. Create Ground Plane
  - b. Navigation
  - c. Model Overlay
  - d. Pseudocolor
- 7. The Model Lighting Ordinance (MLO)
  - a. Adding Required Calculation Points
  - b. Compliance Report
- C. Room Estimator
  - 1. Zonal Cavity Method Estimate
  - 2. Exporting to Model
- D. Interior Lighting
  - 1. Import 2D CAD file, Build Rooms on Top
  - 2. Assign Calculation Points to Room Surfaces
  - 3. Define and Place Luminaires
    - a. Change Symbols
    - b. Utilize Room Estimator to Help
    - c. Adjust Layout
  - 4. Evaluate the Design
    - a. Change Reflectances
    - b. Pseuocolor
    - c. Direct and Indirect Renderings
  - 5. Add Detail to the Model
    - a. Textures
    - b. Objects
- E. Fine Tuning Radosity
- F. Project Manager
  - 1. Overview
  - 2. Project Level Functions
  - 3. Entity Level Functions
  - 4. Using Multiple Projects
- G. Scene Manager
  - 1. Create Scenes
  - 2. Create Channels
  - 3. Set switching and dimming status for Channels

**NOTE:** NOT included in this course: Roadway lighting design & analysis. Roadway topics are covered in detail in our Roadway Emphasis Class and Intermediate Roadway Class. Daylighting is not covered in the Introductory class.