



***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.

## **2-DAY 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. Pseudocolor
    - 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.