



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.*

Topics Covered:

- 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.