**RHINO INSIDE REVIT ESSENTIALS**

 **Prerequisite:** Working knowledge of Windows, familiarity with Rhinoceros OR Revit.

License of Rhino 7 (90-day evaluation version available) with Rhino installed

 License of Revit 2018-2021, with Revit installed

 Installation of Rhino.Inside.Revit Beta Plugin for Revit, with the plugin installed

 **Time:**  (1) Session – 4 Hours

**OBJECTIVE**

 This workshop introduces you to  general functionality available with Rhino.Inside.Revit and important considerations when working with complex geometry. Pre-written Grasshopper definitions will be reviewed in deep-dives, and sample definitions will be built in real-time from beginning to end.

**TOPICS INCLUDE:**

**THE USER INTERFACE**

 Rhino 7 will be opened first to demonstrate how plugins can be installed via the new Package Manager (Elefront, Human, Kangaroo, etc.). Quick review of the Revit, Rhino, and Grasshopper interfaces.

**INTRODUCTION TO RHINO.INSIDE.REVIT GRASSHOPPER COMPONENTS**

 Review the 200+ components organized onto 18 panels that have been built for sending and pulling model information between Revit and Grasshopper. Users can build native Revit elements, query Revit model information, convert geometry between programs, and much more!

**REVIT TO RHINO WORKFLOW**

 Use the Query, Filter, and Input components in Grasshopper to collect Revit elements by Category, Family, Type, or Name. Revit Geometry can be converted to Rhino / Grasshopper Geometry and baked and organized onto Layers and Sublayers with the Grasshopper plugin Elefront.

**RHINO TO REVIT WORKFLOW**

 Create new Revit Families from Rhino Geometry based on Revit Family Templates (RFTs), driven with a live link from Rhino Geometry🡪Grasshopper🡪Revit. Drive adaptive component instances with Grasshopper points.

**GENERATIVE DESIGN**

 Access and control advanced Revit Families and their parameters with the logic components available in Grasshopper. The high-level control of model elements allow designers to quickly populate their models dynamically. The full workflow will be covered so that it is clear what logic requires Rhino.Inside.Revit components or purely Grasshopper components.