Overview
This is where your Revit Architecture Journey will begin. This course covers the basics of Revit Architecture, from schematic design through construction documentation. Delegates are introduced to the concepts of Building Information Modelling and the tools for parametric building design and documentation.

Who should Attend?
This course is designed for new users of Revit Architecture.

Prerequisites
No previous CAD experience is necessary. However, architectural design, drafting or engineering experience is highly recommended. It is recommended that delegates are Microsoft Windows proficient.

Software
• Revit 2020

What’s Included?
• Course Notes & Stationery*
• Computer and software for the duration of course*
• Coffee, Tea & Delicious Lunch*
• WiFi Access*
• Autodesk Certified Instructor
• Internationally recognized Autodesk Authorized Training Certificate
• Eligible to claim 6 Category 1 SACAP points

* Pertains to in-class training only
** In-class training typically occurs over a 3 day period, customised training may differ
Course Content

SESSION 1
• Introduction to Building Information Modelling (BIM)
• Introduction to Revit User Interface (UI)
  - Show Examples ie. Rendering, Drafting; Draw detail, Do Modelling.
• Creating Levels – with/without ‘Floor Plan View’
  - View -> New -> Floor plan = to create floor plan from Level.
• Grids
• Creating Walls using Lines, Rec, Arc etc.
• Inserting Doors/Windows
• Inserting SA Content,
• Inserting components, RPC – Archvision
• 3D View & Navigation Cube
• View Properties - Scale,Detail level, Display, Shadow,Crop Region, Temp Hide,Hide in View
• Elevation Markers
• Section Box (Only in 3D View)
• Temp Dimensions, Individual dms, Entire Wall Dimensioning, Dimension Locking, EQ constraint
• Inserting CAD Drawing/Tracing with Wall Tool

SESSION 2
• Move (Rehost) Copy (RMC – create Similar) Rotate (Spacebar) Mirror , Pin, Align, Split, Trim, Offset.
• Editing Wall Properties – show Wall “Function” property, Wall joins
• Drawing Ground Floor Slab, Drawing First Floor Slab
• Creating Section Lines, Section Range
• Place views on Sheets
• Basic Titleblock Editing
• Tutorial
• Draw multi-level building, See Tutorial page

SESSION 3
• Creating Foundations
• Edit Elevation Profiles – roof,floor,wall. > creating stepped foundations
• Use Drafting lines to show step.
• Roof by Footprint, Flat roof, slope arrow (multiple arrows)
• Roof – Layers
• Show Structural Truss and Draw truss with Drafting Lines.
• Roof by Extrusion – go to Elevation first
• View Range – View Roof, Foundation plan.
• Work Planes Principles
• Model Text
• Decal, Settings > Decal Types
• Arch Column vs Structural Column
• Attach Column.

SESSION 4
• Host sweeps
• Wall Sweeps - Hor/Ver, Setback from windows/doors, Sweep Return
• Fascia – Add/Remove Segments,
• Floor slab edge - Join Geometry
• Load profile and Apply profile.
• Ceilings, Sloped Ceilings
• Inserting Lights and Light fittings
• Create Camera Views – Turn Section Box on for Perspective Section.
• Ramp
• Stair Basics- Manually add Boundaries and Risers
• Railings Basics – add to Host stair
• Curtain Walls Basics
  - Use Curtain Grid, Add Mullions
  - Use Grid /Mullion in System
Course Content

**Tutorial**
- Add Stepped Foundations,
- Add Roof by Extrusion & Footprint,
- Change Gutter profile,
- Add sloped Ceiling,
- Add Light Fittings and increase intensity,
- Add Ramp,
- Add Stairs & Railings > Import System Family Files.

**SESSION 5**
- Object Styles - Categories – Model, Perspectives, Annotations.
- Global settings – lineweights
- Visibility Overides + Visibility on/off setting
- View Overides – RMC Override Object in View
- Settings > Lineweights (hatching uses Pen #1) Linestyles, Line patterns
- Linework Tool for Elevations
  - Show stepped foundations in back and use “Invisible” Line to hide.
- Spot Elevation/Spot Slope
- Ref Plane – and Naming of ref plane.
- Symbol ie. North Sign. Show how to create new Symbol ie Electrical switch.
- Filled Region, Masked Region

**SESSION 6**
- Detail Callout
- Detail Component
- Repeating detail – use Examples and Transfer Project Stds

**SESSION 7**
- Materials – duplicate to create new
- Fill Patterns
- Render Appearance Library – is Read-Only Library.
- Paint and Split face
- Property Line – by Lines (chg Units) , by Table. (chg Site Settings Units)
- Basic Topography/Site – Pick Points. Then give heights.
- Split Surface.
- Basic Schedules – Roof, Windows/Doors
- Creating Legend View
- Tags
- Room Tags & Area
- Export – Floor Area Analysis
- Export – Dwg – make sure you turn “Xref” off.
- Export - Image, Html webpage
- Printing
- Rendering Settings
- Mental Ray Rendering – set up link if custom Images are used.
- Help
- Autodesk Seek
- New Features Workshop

**Tutorial**
- Create Site with Roads. Add Plants. Do External & Internal Rendering.
Course Registration Form

Please complete, sign and return together with proof of payment to mgfxsales@mgfx.co.za or fax 086 694 9404

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<tr>
<td>Course Name: Revit Architecture Essentials</td>
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Terms & Conditions:

1. Above Pricing Excludes VAT.
2. Students are to be at the training venue by 08h00 in preparation for a 08h30 start time.
3. Bookings can only be considered confirmation on receipt of payment.
4. Bookings may be changed up to three weeks in advance of the course. A fee of 20% will be levied to cover charges.
5. For full day courses, we will supply you with the relevant training material. A desktop computer to use for the training (where applicable) tea/coffee and a full lunch for full day InClass training hosted at the training center only. Catering is not included for OnSite training and laptop is available for hire at an additional cost if required.
6. Cancellation or rescheduling requests must be in writing and reach us at least 5 (five) working days prior to the course commencement date. Full course fees may be retained for no shows or requests within 5 working days prior to commencement.
7. Although we go to great lengths to ensure that all training proceeds as scheduled, we reserve the right to cancel or postpone dates if we require to do so and undertake to inform clients in writing and telephonically of these changes.
8. We suggest clients wait until a week prior to course commencement that a course has been confirmed to go ahead as scheduled before booking flight and accommodation. We are NOT responsible for cost associated with cancellation of classes such as flight and accommodation for clients.
9. Full training fees will apply if the above condition is not complied with.

Signed & Accepted

Name

Location