

Autodesk® Revit Architecture - Intermediate

Brief Synopsis of Class Contents:

This class builds on the concepts and skills introduced in the Autodesk Revit Architecture Fundamentals class. The student will learn more advanced techniques and tools to allow for exploration of Design Options and how to accommodate renovation and addition projects across multiple phases of construction. Learn how to create and manipulate topographic surfaces and learn best practices for linking project models and site models together using shared coordinates. To round out the class, students will be introduced to family editing, learning to create several 2D family types.

Learning Objectives:

- Explore Design Options
- Learn about collaboration and file sharing
- Learn how to create and manipulate topographic surfaces
- Review best practices for linking project models and site models together
- Learn about additional schedule types and advanced scheduling concepts
- Learn about family editing and create several 2D family types

Courseware:

Ascent Official Training Courseware
-Revit Architecture Collaboration Tools
-Revit Architecture Site and Structural Tools

Number of Days:

3 Half Day Sessions

Continuing Education Hours:

12 hours

Who Should Attend:

Architects, Engineers and Master Planners

Prerequisites:

Current users of Revit Architecture should be comfortable with Revit fundamental concepts.

System and Software Requirements:

<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-System-Requirements>

FAQs and Cancellation Policy:

<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-FAQS>

Class Outline and Topics:

Project Phasing

- View and Element Phase Properties
- Phase Settings: Phases, Phase Filters, Graphic Overrides
- Element States: Existing, New, Demolished, Temporary
- Phase mapping across linked files
- Phase-specific schedules

Design Options

- Option Sets & Options
- Primary and Secondary Options
- Visibility Graphics for Design Options
- Design Options visibility across Linked files
- Design Options-specific schedules

Groups and Links

- Model Groups / Attached Detail Groups
- Detail Groups
- Group Editing and Manipulation
- Save Group as Project / Insert Project as Group

Importing / Exporting

- Importing Vector files / Import Properties
- Import Raster Images
- Exporting Files / DWG Settings
- Export for Energy Analysis

Project Team Collaboration

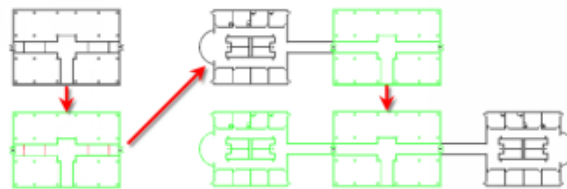
- View Filters / View Templates
- Linking Files / Linked File View Properties
- Interference Checking

- Copy/Monitor and Coordination Review
- Reconcile Hosting
- Worksharing / Worksets
- Central and Local Project Files
- Multi-Discipline Coordination Best Practices



Site Design and Shared Coordinates

- Toposurfaces: By Points, Import, Points File
- Building Pad, Sub-Regions, Split Surface
- Grading (Cut & Fill) Concepts
- Site Components, Property Line, Site Annotation
- Linking Project Model(s), Project Location
- Shared Coordinates



Structural Tools

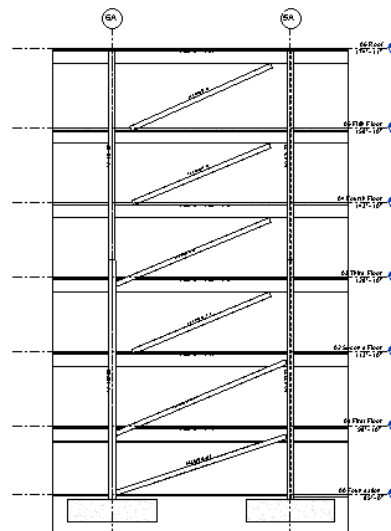
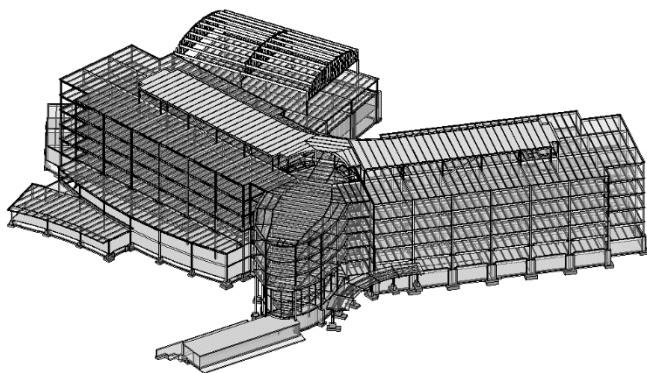
- Review Levels and Structural Grids
- Columns, Beams, Beam Systems, Bracing, Trusses, Slabs, Foundations
- Framing Plans and Elevations
- View Properties / View Templates

Schedules

- Using Shared Parameters
- Calculated Values
- Key Schedules and Other Schedule Types
- Conditional Formatting

2D Family Editing

- Introduction to Family Editing Concepts
- Profiles
- Annotations
- Parameters
- Using Profiles in Host Families



| Footing Schedule | | | | |
|------------------|-----------------------|-------|-----------------|---|
| Mark | Size | Count | Volume (Totals) | Reinforcing (Each Way, Unless Noted Otherwise) |
| | | 6 | 430.40 CF | |
| F1 | 5'-6" x 5'-6" x 19" | 14 | 1341.08 CF | 6-#6 |
| F2 | 6'-0" x 6'-0" x 21" | 10 | 1260.00 CF | 7-#6 |
| F3 | 7'-0" x 7'-0" x 24" | 14 | 2744.00 CF | 7-#7 |
| F4 | 8'-0" x 8'-0" x 27" | 18 | 5184.00 CF | 7-#8 |
| F5 | 9'-0" x 9'-0" x 30" | 11 | 4455.00 CF | 7-#9 |
| F6 | 10'-0" x 10'-0" x 33" | 9 | 4950.00 CF | 8-#9 |
| F7 | 11'-0" x 11'-0" x 36" | 8 | 5808.00 CF | 10-#9 |
| F8 | 12'-0" x 12'-0" x 39" | 10 | 9360.00 CF | 9-#10 |
| F9 | 13'-0" x 13'-0" x 41" | 8 | 9238.67 CF | 11-#10 |
| F10 | 15'-0" x 15'-0" x 47" | 8 | 14100.00 CF | 12-#11 |
| F11 | 18'-0" x 18'-0" x 55" | 8 | 23760.00 CF | 17-#11 |
| F12 | 20'-0" x 20'-0" x 61" | 6 | 24400.00 CF | 21-#11 |
| F13 | 11'-0" x 5'-0" x 12" | 5 | 550.00 CF | 4-#6 LONG, 10-#6 SHORT |
| F14 | 54'-0" x 24'-0" x 66" | 1 | 14256.00 CF | SEE DETAIL 7/S-401 |
| F15 | 16'-0" x 16'-0" x 50" | 4 | 8533.33 CF | 13-#11 |
| F16 | 16'-0" x 10'-0" x 40" | 2 | 2133.33 CF | #7@12" TOP, #9@12" BOTTOM |
| F17 | 19'-0" x 12'-0" x 48" | 1 | 1824.00 CF | #7@12" TOP, #11@8" BOTTOM (LONG), #9@12" BOTTOM (SHORT) |
| F18 | 20'-0" x 12'-0" x 48" | 4 | 7680.00 CF | #7@12" TOP, #11@8" BOTTOM (LONG), #9@12" BOTTOM (SHORT) |
| F19 | 12'-0" x 8'-0" x 24" | 6 | 1728.00 CF | #4@18" TOP, 10-#7 BOTTOM (LONG), 10-#5 BOTTOM (SHORT) |
| F20 | 16'-0" x 11'-5" x 12" | 1 | 365.33 CF | |
| F21 | 16'-0" x 11'-3" x 12" | 1 | 360.00 CF | |
| F22 | 6'-10" x 4'-8" x 12" | 1 | 63.78 CF | |
| Grand total | | 156 | 144524.93 CF | |