Collin College - Continuing Education
COURSE SYLLABUS

COURSE INFORMATION

Course Number: CADD 6270

Course Title: Revit Architecture Essentials

Course Description: Introduction to Revit Architecture

Suggested Course Prerequisite(s): Familiarity with Windows

Course Resources: Flash drive USB storage media (thumb drive) is recommended, not required.
Optional: Mastering Autodesk Revit 2017 and Architecture Sybex, 978-1-119-24000-6

Student Learning Outcomes: Demonstrate navigation of Revit Architecture interface, manage views, and identify the different types of building elements.

Certification Notes: N/A

Next course recommendation: Revit Architecture, Advanced.

Refund Policy: Please refer to www.collin.edu/ce/inforegistrar.html for our refund policy. No refunds after the start time of the first class.

Americans with Disabilities Act: Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student’s responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current Collin Student Handbook for additional information.

Course Sessions: Listed are guidelines to indicate all topics that will be covered during your course. Do not plan your personal calendar based on these sessions. Your instructor will give you a calendar for your class that will indicate specific topics, assignments, and days.

Lesson Plan – by week or session:
1. Revit Building Interface
2. Starting a Design; the Basics of Building
3. Using Dimensions and Constraints
4. Developing the Building Model
5. Using Building components
6. Creating Schedules
7. Detailing and Drafting
8. Presenting the Building Model
**Detailed list:**

**Revit Concepts**
- Parametric Objects
- Bidirectional Associativity
- Embedded relationships
- User-defined rules

**Types of elements**

**List of categories: Settings/Object Styles**
- Model categories
- Annotation categories
- Subcategories
- Families:
  - System families
  - Standard families
  - In-Place Families

**Starting Revit: Start Page**

**Revit Interface**
- Title bar, Toolbars, Ribbon
- Type Selector, Properties button, Options bar
- Status bar, Design bar
- Project Browser—organization, optional views
- Families—loaded, not necessarily used
- Revit links
- View window—multiple, active
- View control bar:
  - Scale, Detail level, Model graphic style, Advanced model graphics
  - Crop region, Hide and isolate—temporary or permanent
  - Annotation crop, Reveal mode

**Selection and View Navigation**
- Mouse left, right buttons & wheel
- Steering wheels
  - Zoom, Pan, Rewind, Orbit, Look, Center, Top Down
- View Cube

**Selecting objects**
- Click on object
- Window left to right
- Window right to left
- Control key to add more; Shift key to deselect objects

**Manipulating objects**
- Grip editing
- Move and copy
- Smart constraints
- Flip controls
- Padlocks to maintain relative position of elements
- Pin tool to keep objects from moving in space

**Keyboard shortcuts**
- Tab—use to cycle between various elements
- Shift+Tab—reverses the default order of cycling
- Delete
- Undo and redo: Ctrl+Z and Ctrl+Y
- Multiple undo—pull-down list
- Spacebar—cycle through rotations and choices

**Modeling Environment**
- Snaps: Settings/Snaps
- Close (a loop)
- Line weights
• Object Styles
• Options
Views
• Creating Views—View tab in Design Bar
• Navigating views
• Creating grids and levels
• View range
• Callouts, Elevations, Sections
• Drafting views
• Legends
• 3D View—Axonometric Views
• 3D View—Perspective (camera) views
• Walkthroughs
Schedules
Modeling Basics
• Levels and Grids—manipulating
• Basic Walls
• Wall properties
• Wall layers and materials
• Curtain walls
• Floors
• Roofs
• Ceilings
• Doors and Windows
Stairs and Railings

Method of Evaluation: Unless otherwise stated, course completion is evaluated on the basis of attendance. Students must be in attendance 90% of each course in a certificate series for successful completion and to earn a certificate as specified.