COURSE SYLLABUS

BIM Certificate Program (Self-Paced)

Gain expertise in Building Information Modeling (BIM) with Revit Architecture to create 3D models for commercial building projects. This hands-on program teaches you the technical skills and workflows for BIM while preparing you for a successful career.

For more information, visit
https://www.creativelive.com/learning-path/bim-certificate-program

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Course Outline

This package includes these courses

- Introduction to Revit (Self-Paced) (30 Hours)
- Intermediate Revit (Self-Paced) (30 Hours)
- BIM Construction Documents I (Self-Paced) (30 Hours)
- BIM Construction Documents II (Self-Paced) (30 Hours)
- BIM Construction Documents III (Self-Paced) (30 Hours)
- BIM Detailing (Self-Paced) (20 Hours)

Introduction to Revit (Self-Paced)

This beginner-level Revit course offers an in-depth exploration of the interconnections within a Building Information Model using Revit's architectural toolset. The curriculum supports development of a fully integrated 3D model that concurrently produces coordinated 2D documentation—such as floor plans, elevations, and rendered perspectives—while drafting and designing. Instruction commences with a predefined template, proceeding through setup of floor plans and elevations, generation of 3D views, assembly of drawing sheets, and exportation of deliverables to PDF. If you are interested in Revit Certification (also referred to as BIM Certification), we recommend completing the Revit Certification Course series to be fully prepared for the Autodesk Certified User Exam for Revit.

- Describe Primary Revit Concepts and how they relate to Building Information Modeling (BIM)
- Explore the Revit User-Interface
- Design a 3D building model to explain how information is interrelated
- Determine the appropriate workflow to complete tasks within Revit
- Develop a project that includes floors, walls, ceilings, stairs, curtain walls, and roof design to strengthen 3D modeling and 2D documentation skills
- Create presentation-level architectural graphics
- Catalog building information using schedules

Intermediate Revit (Self-Paced)

This intermediate-level online BIM course delves into advanced project-documentation techniques within Revit Architecture. Building upon an existing model, the curriculum covers scheduling components, family-editor workflows for 2D and 3D content creation, graphic refinement, and assembly of a concise construction–document set. Through hands-on exercises, the course demonstrates how to transform a conceptual model into an interoperable set of construction drawings. If you are interested in Revit Certification (also referred to as BIM Certification), we recommend completing the Revit Certification Course series to be fully prepared for the Autodesk Certified User Exam for Revit.

- Integrate DWG Files to create Revit details
- Tag elements for cost estimation and material take-offs
- Explore the capabilities of design options and how to present different options
- Create 3D parametric families
- Build customized door, material, and room schedules that can be used for construction take-offs
- Explore BIM project Management techniques to keep models efficient and user-friendly

BIM Construction Documents I (Self-Paced)

This online Revit course is the first of two Construction Document courses and focuses on Revit Architecture tools. You will model an existing single-story commercial building, using imported AutoCAD drawings as a base, and develop a site model. You will continue developing your Revit skills by modeling a significant two-story expansion of the initial building. This project scenario reflects the type of work commonly handled by AEC teams using Revit in professional settings.

- Apply BIM modeling tools to create an architectural model that includes existing conditions, partial demolition, and new construction
- Build project topography using external files and develop a site plan incorporating hardscape and landscaping
- Graphically represent project phasing, clearly distinguishing existing construction, demolition, and new construction
- Create renderings suitable for both presentation and documentation

BIM Construction Documents II (Self-Paced)

You will create construction documents for the commercial building and site created in BIM 301. You will create the sheet drawings and will add keynotes, detail drawings and schedules.

- Prepare a set of architectural construction documents incorporating the site and building models created in BIM 301.
- Develop progress sets of construction documents, reflecting 30/60/90/100 percent deliverable submittals.
- Produce plan, section, and elevation views of the project for sheet layout.
- Keynote elements of the project model. Develop schedules and a limited number of architectural details extracted from the BIM model.

BIM Construction Documents III (Self-Paced)

This course examines how Revit users design 3D models that simultaneously document the project and generate 2D architectural drawings. This class consists of two main projects; we begin by exploring the Primary Revit Concepts by creating a small residential building, and then build upon and expand our skills by creating a 3D model of a commercial building, and presenting the model using floor plans, elevations, and 3D perspective views.

- Describe Primary Revit Concepts and how they relate to Building Information Modeling (BIM)
- Design a 3D building model to explain how information is interrelated

- Develop a project that includes floors, walls, ceilings, stairs, curtain walls, and roof design to strengthen 3D modeling and 2D documentation skills
- Catalog building information using schedules
- Explore the Revit User-Interface
- Determine the appropriate workflow to complete tasks within Revit
- Create presentation-level architectural graphics

BIM Detailing (Self-Paced)

Master the art of creating detailed construction drawings that ensure structural integrity, safety, and design clarity. This course focuses on developing your skills in Revit to create comprehensive building system details and manage them according to industry standards.

- Create detail drawings of building systems which illustrate structural integrity and sound building construction practices
- Create and integrate detail drawings which limit or prevent accidental injury or death among users of the buildings
- Prepare detail drawings illustrating construction systems, products, and finishes
- Develop details and manage the detail information to confirm with project-based lineweight and National CAD/BIM standards. Abbreviated set of construction documents