

ID 3715 - BUILDING INFORMATION MODELING: REVIT

Credits: 3

This junior-level course introduces students to Building Information Modeling (BIM) and Revit software and its use for three-dimensional modeling and rendering for design development, presentation, and construction drawings. Emphasis is on the appropriate use of commands, routines, operations, and settings for studying and presenting designs for the built environment. Upon successful completion of this course, students understand the software and systems studies and use those systems to develop three-dimensional computer models to represent design solutions.

Prerequisites: ID 2530 - Building Codes + Regulations and ID 2710 - Introduction to Computer Aided Design (CAD)

Notes: (Formerly ID 3715 Building Information Modeling, ID 4750 Building Information Modeling)

Course Learning Outcomes	Exceeding	Meeting	Developing	Not meeting	Program Outcomes	Institutional Outcomes	CIDA Standards
Apply knowledge and skills learned to synthesize information to generate evidence-based design solutions.	Generates evidence-based design solutions.	Synthesizes information within design solutions.	Analyzes information within design solutions.	Does not synthesize information to generate evidence-based design solutions.	ID5 DESIGN PROCESS	Design Competence, Critical Thinking	CIDA Standard 8. Design Process
Apply knowledge and skills learned to execute the design process: pre-design, quantitative and qualitative programming, schematic design, and design development.	Executes comprehensive and critical design processes: pre-design, quantitative and qualitative programming, schematic design, and design development.	Applies knowledge and skills learned to execute the design process: pre-design, quantitative and qualitative programming, schematic design, and design development.	Applies some knowledge and skills learned to execute some components of the design process: pre-design, quantitative and qualitative programming, schematic design, and design development.	Does not apply knowledge and skills learned to execute the design process: pre-design, quantitative and qualitative programming, schematic design, and design development.	ID5 DESIGN PROCESS	Design Competence, Critical Thinking	CIDA Standard 8. Design Process
Demonstrate the ability to explore a range of two- and three-dimensional design solutions using a variety of media.	Creates designs informed by a range of two- and three-dimensional design solutions using a variety of media.	Explores a range of two- and three-dimensional design solutions using a variety of media.	Explores some two- and three-dimensional design solutions using some variety of media.	Does not explore a range of two- and three-dimensional design solutions using a variety of media.	ID8 DESIGN ELEMENTS + PRINCIPLES	Design Competence	CIDA Standard 11. Design Elements and Principles
Effectively apply the elements and principles of design and related theories throughout the interior design curriculum to two-dimensional design solutions.	Analyze the elements and principles of design and related theories throughout the interior design curriculum to two-dimensional design solutions.	Apply the elements and principles of design and related theories throughout the interior design curriculum to two-dimensional design solutions.	Recognize the elements and principles of design and related theories throughout the interior design curriculum to two-dimensional design solutions.	Does not apply the elements and principles of design and related theories throughout the interior design curriculum to two-dimensional design solutions.	ID8 DESIGN ELEMENTS + PRINCIPLES	Design Competence	CIDA Standard 11. Design Elements and Principles
Effectively apply the elements and principles of design and related theories throughout the interior design curriculum to three-dimensional design solutions.	Analyze the elements and principles of design and related theories throughout the interior design curriculum to three-dimensional design solutions.	Apply the elements and principles of design and related theories throughout the interior design curriculum to three-dimensional design solutions.	Recognize the elements and principles of design and related theories throughout the interior design curriculum to three-dimensional design solutions.	Does not the elements and principles of design and related theories throughout the interior design curriculum to three-dimensional design solutions.	ID8 DESIGN ELEMENTS + PRINCIPLES	Design Competence	CIDA Standard 11. Design Elements and Principles
Understand color in relation to materials, textures, light, and form.	Applies color in relation to materials, textures, light, and form.	Understands color in relation to materials, textures, light, and form.	Recognizes color in relation to materials, textures, light, and form.	Does not understand color in relation to materials, textures, light, and form.	ID9 LIGHT + COLOR	Design Competence, Critical Thinking	CIDA Standard 12. Light and Color
Appropriately use color solutions across different modes of design communication.	Critically and creatively uses color solutions across different modes of design communication.	Appropriately uses color solutions across different modes of design communication.	Uses color solutions across some modes of design communication.	Does not appropriately use color solutions across different modes of design communication.	ID9 LIGHT + COLOR	Design Competence, Critical Thinking	CIDA Standard 12. Light and Color