

Goodheart-Willcox Publisher
Correlation of Exploring Drafting ©2018
to North Carolina Department of Education
Course: NCCTE IC63 Drafting III - Architectural (Grades 9–12)



Standards		Correlating Text Pages
NCCTE.2020.IC63 - Drafting III - Architectural		
NCCTE.2020.IC63.01.00 Understand Foundation Design, Calculations and Construction.		
NCCTE.2020.IC63.01.01	Understand terms and definitions relating to foundation design, calculations and construction.	513-514, 524
NCCTE.2020.IC63.01.02	Understand use of footings, foundation walls, girders, piers, ventilation, and slab floor/foundations.	513-514, 524
NCCTE.2020.IC63.02.00 Apply Procedures to Create Basic Electrical Design Concepts.		
NCCTE.2020.IC63.02.01	Apply terms and symbols used to indicate electrical fixtures in a residential design.	506-508
NCCTE.2020.IC63.02.02	Apply the rules and standards for electrical fixture placement.	500-508
NCCTE.2020.IC63.02.03	Apply the rules and standards for electrical fixture placement and create an electrical/lighting plan using 3D CAD software, such as Revit Architecture.	142-178, 507
NCCTE.2020.IC63.03.00 Apply Procedures to Create Stair/Railing Designs for Construction.		
NCCTE.2020.IC63.03.01	Apply terms and definitions relating to stair design and construction.	516-517
NCCTE.2020.IC63.03.02	Apply the parts and standards used to construct various stair system and types (Straight, Curved, with landings and turns).	516-517
NCCTE.2020.IC63.03.03	Apply the calculations for rise, run, total rise, total run, and floor cutout.	516-517
NCCTE.2020.IC63.03.04	Apply typical railing design and construction for stairs, landings and decks.	516-517
NCCTE.2020.IC63.03.05	Apply accepted procedures to draw plans for stair construction using 3D CAD software, such as Revit Architecture.	142-178
NCCTE.2020.IC63.04.00 Apply Procedures to Create Advanced Kitchen and Bath Details.		
NCCTE.2020.IC63.04.01	Apply terms, concepts and elements related to kitchen and bath details and design.	513-535
NCCTE.2020.IC63.04.02	Apply plans for kitchen cabinet drawings, standard sizes and configurations.	513-535

Standards		Correlating Text Pages
NCCTE.2020.IC63.04.03	Apply procedures to draw enlarged detailed plans and interior elevations for kitchens and baths using 3D CAD software, such as Revit Architecture.	142-178
NCCTE.2020.IC63.05.00 Apply Procedures to Create Multi-level Residential Floor Plans.		
NCCTE.2020.IC63.05.01	Understand terms, definitions and accepted principles related to 2-story or multi-level residential space planning.	513-535
NCCTE.2020.IC63.05.02	Understand residential door and window types (review of Level II Arch).	513-535
NCCTE.2020.IC63.05.03	Understand floor plan symbols for doors, windows and room identification.	513-535
NCCTE.2020.IC63.05.04	Understand the steps in drawing, dimensioning, and annotating a 2 story or multi-level floor plan.	513-535
NCCTE.2020.IC63.05.05	Apply procedures to design, draw and annotate a 2 story or multi-level residential floor plan, including foundation plan using 3D CAD, BIM software.	513-535
NCCTE.2020.IC63.06.00 Apply procedures to create a Site Development Plan.		
NCCTE.2020.IC63.06.01	Apply terms related to site development.	446-447, 521
NCCTE.2020.IC63.06.02	Apply factors to be considered when developing a site for residential construction.	446-447, 513-535
NCCTE.2020.IC63.06.03	Apply the lines, symbols, and features found on site plans.	513-515
NCCTE.2020.IC63.06.04	Apply how to develop a site plan drawing.	446-447, 513-535
NCCTE.2020.IC63.06.05	Apply accepted procedures to draw a site plan for a residential structure using 3D CAD software, such as Revit Architecture.	142-178
NCCTE.2020.IC63.07.00 Apply Procedures and Construction Techniques to Create a Small Commercial Building Design.		
NCCTE.2020.IC63.07.01	Apply various types of small commercial design projects.	513-535
NCCTE.2020.IC63.07.02	Apply the different construction practices from residential to commercial; metal studs vs. wood construction, steel beams.	513-535
NCCTE.2020.IC63.07.03	Apply commercial reflected ceiling plans, including lighting layout, electrical and fire protection symbols.	506-508
NCCTE.2020.IC63.07.04	Apply Grid and column design and layout, labeling.	513-535



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Standards		Correlating Text Pages
NCCTE.2020.IC63.07.05	Apply multi-story stair design for commercial buildings.	516-517
NCCTE.2020.IC63.07.06	Apply procedures to draw a small commercial building using 3D CAD software, such as Revit Architecture.	142-178
NCCTE.2020.IC63.08.00 Apply Procedures to Create Rendering and Walkthroughs.		
NCCTE.2020.IC63.08.01	Apply the definition, purpose and techniques for a 3D rendering of a building.	142-178
NCCTE.2020.IC63.08.02	Apply interior lighting and exterior solar effects on a building design.	142-178
NCCTE.2020.IC63.08.03	Apply how camera angles affect perspective views of a building, interior and exterior.	142-178
NCCTE.2020.IC63.08.04	Apply 3D building walkthroughs.	142-178
NCCTE.2020.IC63.08.05	Apply CAD techniques to create a 3D rendering of an architectural model using 3D CAD software, such as Revit Architecture.	142-178, 560