

Certified BIM Specialist: Road and Highway Solution 2014

Autodesk® Infrastructure Design Suite



Autodesk certifications are industry-recognized credentials that can help you succeed in your design career—providing benefits to both you and your employer. The certifications provide reliable validation of skills and knowledge, and they can lead to accelerated professional development, improved productivity, and enhanced credibility.

Autodesk highly recommends that you structure your examination preparation for success. This means scheduling regular time to prepare, reviewing this exam preparation roadmap, using the Autodesk Official Training Guides, and taking a course at one of our Authorized Training Centers. Equally as important, actual hands-on experience is recommended.

The Certified BIM Specialist: Road and Highway Solution (Using the Autodesk Infrastructure Design Suite) exam is aimed at assessing Professional users' knowledge of the tools, features, and common tasks using multiple products in the Autodesk Infrastructure Design Suite. The exam is comprised of 40 questions, of which the majority require you to use Autodesk® InfraWorks and AutoCAD® Civil 3D® to create or modify a road and highway model and solution. You will identify numeric and text properties of the model and then type your answer into an input box. Other question types include multiple choice, matching, and point-and-click (hotspot). The exam has a 3-hour time limit (in some countries, the time limit may be extended).

You may take the exam up to three times within a 12-month period.

ATC® Instructor-Led Courses

The Autodesk Authorized Training Center (ATC®) program is a global network of professional training providers offering a broad range of learning resources. Autodesk recommends that test takers consider taking a certification preparation course at one of these centers. Visit the online ATC locator at <http://www.autodesk.com/atc>

Official Preparation Material

The Autodesk Official Training Guide for the Certified BIM Specialist: Road and Highway Solution is published by Ascent. This training guide is available for purchase in printed or ebook format the Ascent website at <http://www.ascented.com/courseware-solutions/autodesk>.

The Autodesk Education Community offers students and educators free software, learning materials, and classroom support. Learn more at <http://students.autodesk.com>

Recommended Experience Level for Certified BIM Specialist: Road and Highway Solution 2014 (Using Autodesk Infrastructure Design Suite) Certification Exam

Actual hands-on experience is a critical component in preparing for the exam. You must spend time using the product and applying the skills you have learned.

Autodesk Infrastructure Design Suite course (or equivalent) plus 100 hours of hands-on application experience.

AutoCAD® Civil 3D®, 2014 Certified Professional Certification Exam is recommended but not required.

Exam Topics and Objectives

We recommend that you review the topics and objectives during your preparation for certification. The Autodesk Official Training Guide for the Certified BIM Specialist: Road and Highway Solution is published by Ascent. These guides cover the topics and objectives listed below. Please note that not all objectives will be tested during your certification exam.

Autodesk Certified BIM Specialist: Road and Highway Solution 2014

Topic	Sub-Topic	Objective
Project planning	Establish existing conditions	Use the interface to create a new model Configure default units for the project Select the appropriate coordinate system for the project Import data of various types into a project Configure data for use in the current project Set project extents
	Navigate the model	Use navigation tools to navigate in the model
	Create a functional transportation model	Select the appropriate style to emphasize an existing road Draw a portion of an existing road by tracing with the road layout tools Draw a road using the Create Roads tool Select a road style Adjust the horizontal and vertical layout of the road Apply a style to convert a portion of a road to a structural object
	Visualize the model (project planning)	Apply visual effects
Preliminary design	Create a proposal	Create a project proposal
	Procedural engineering	Draw a new version of the road layout using layout tools Modify the horizontal layout Modify the profile using vertical road layout tools Enter design values and costing information Enter financial parameters Run vertical optimization for relevant scenarios
	Analyze options per project constraints	Identify the relevant project constraints Choose the optimum proposal based upon spatial analysis Choose the optimum proposal based upon numerical analysis
	Visualize the model	Create a storyboard
	Analyze options per project constraints	Analyze the model using visual analysis tools
	Data export	Export the InfraWorks model to Civil 3D
Detailed design	Data import	Import the .imx file into Civil 3D
	Design a corridor	Construct an assembly based on project requirements Create the initial corridor Calculate Superelevation Enhance the corridor by adding regions Enhance the corridor by using targets Enhance the corridor by adding an intersection Edit the corridor using the Corridor Section Viewer Modify a corridor using Grip Edits
	Perform quantity-takeoff	Create a finish ground corridor surface Create sample lines Calculate cut/fill Calculate materials
	Validate the road design in the context of other systems (utilities, structures, etc.)	Combine data from Civil 3D and other sources in Navisworks Perform clash detection
Visual communication	Aggregate data for visual output	Import Civil 3D road design into InfraWorks
	Improve visual quality	Configure visual effects
	Present the design	Render images Export a storyboard to video Create a scenario

For more information

<http://www.autodesk.com/certification>

Find an Autodesk Certification Center

<http://autodesk.starttest.com>