



Autodesk Revit[®] Architecture 2011 Conceptual Design & Visualization

Student Guide - Imperial

*Revision 1.0
July 2010*

ASCENT - Center for Technical Knowledge®
Autodesk Revit® Architecture 2011
Conceptual Design & Visualization
Revision 1.0

Prepared and produced by:

ASCENT Center for Technical Knowledge
1001 E. Market Street, Suite 102
Charlottesville, VA 22902

866-527-2368
www.ascented.com



ASCENT - Center for Technical Knowledge is a division of RAND Worldwide Inc., providing custom developed knowledge products and services for leading engineering software applications. ASCENT is focused on specializing in the creation of education programs that incorporate the best of classroom learning and technology-based training offerings.

We welcome any comments you may have regarding this training manual, or any of our products. To contact us please email: education@ASCENTed.com.

© ASCENT - Center for Technical Knowledge, 2010

Printed in the United States of America, all rights reserved. No part of this manual may be reproduced in any form by any photographic, electronic, mechanical or other means or used in any information storage and retrieval system without the written permission of ASCENT, a division of RAND Worldwide, Inc.

Revit® Architecture is a registered trademarks of Autodesk, Inc.

Autodesk Official Training Guide is a registered trademark of Autodesk, Inc.

General Disclaimer:

NOTWITHSTANDING ANY LANGUAGE TO THE CONTRARY, NOTHING CONTAINED HEREIN CONSTITUTES NOR IS INTENDED TO CONSTITUTE AN OFFER, INDUCEMENT, PROMISE, OR CONTRACT OF ANY KIND. THE DATA CONTAINED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT REPRESENTED TO BE ERROR FREE. ASCENT, ITS AGENTS AND EMPLOYEES, EXPRESSLY DISCLAIM ANY LIABILITY FOR ANY DAMAGES, LOSSES OR OTHER EXPENSES ARISING IN CONNECTION WITH THE USE OF ITS MATERIALS OR IN CONNECTION WITH ANY FAILURE OF PERFORMANCE, ERROR, OMISSION EVEN IF ASCENT, OR ITS REPRESENTATIVES, ARE ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, LOSSES OR OTHER EXPENSES. NO CONSEQUENTIAL DAMAGES CAN BE SOUGHT AGAINST ASCENT OR RAND WORLDWIDE FOR THE USE OF THESE MATERIALS BY ANY THIRD PARTIES OR FOR ANY DIRECT OR INDIRECT RESULT OF THAT USE.

THE INFORMATION CONTAINED HEREIN IS INTENDED TO BE OF GENERAL INTEREST TO YOU AND IS PROVIDED "AS IS", AND IT DOES NOT ADDRESS THE CIRCUMSTANCES OF ANY PARTICULAR INDIVIDUAL OR ENTITY. NOTHING HEREIN CONSTITUTES PROFESSIONAL ADVICE, NOR DOES IT CONSTITUTE A COMPREHENSIVE OR COMPLETE STATEMENT OF THE ISSUES DISCUSSED THERETO. ASCENT DOES NOT WARRANT THAT THE DOCUMENT OR INFORMATION WILL BE ERROR FREE OR WILL MEET ANY PARTICULAR CRITERIA OF PERFORMANCE OR QUALITY. IN PARTICULAR (BUT WITHOUT LIMITATION) INFORMATION MAY BE RENDERED INACCURATE BY CHANGES MADE TO THE SUBJECT OF THE MATERIALS (I.E. APPLICABLE SOFTWARE). RAND SPECIFICALLY DISCLAIMS ANY WARRANTY, EITHER EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Table of Contents

Preface	iii
Chapter 1 Massing Studies	1-1
1.1 Overview of Massing Studies	1-3
1.2 Placing Mass Elements	1-5
Practice 1a Basic Mass Elements	1-8
1.3 Creating Conceptual Massing	1-10
1.4 Setting Work Planes	1-12
1.5 Creating Mass Forms	1-15
1.6 Dynamic Editing for Conceptual Massing	1-24
Practice 1b Creating and Modifying In-Place Masses	1-29
Practice 1c Creating and Modifying In-Place Masses - Part II (Optional)	1-32
1.7 From Massing to Building	1-36
Practice 1d From Massing to Building	1-40
Chapter 2 Space Planning & Area Analysis	2-1
2.1 Space Planning	2-3
Practice 2a Space Planning	2-11
2.2 Area Analysis	2-13
Practice 2b Area Analysis	2-18
2.3 Creating Color Schemes	2-21
Practice 2c Creating Color Schemes	2-27
Chapter 3 Visualization	3-1
3.1 Perspectives	3-3
Practice 3a Perspectives	3-7
3.2 Creating Walkthroughs	3-8
Practice 3b Creating Walkthroughs	3-12
3.3 Solar Studies	3-14
Practice 3c Solar Studies	3-23
Chapter 4 Rendering	4-1
4.1 Basic Rendering	4-3
Practice 4a Basic Rendering	4-11
4.2 Working with Lighting	4-13
Practice 4b Lighting	4-19
4.3 Enhancing Renderings	4-23

Practice 4c Enhancing Renderings.....	4-24
Conceptual Mass Families	A-1
1.1 Conceptual Mass Families.....	A-3
Exercise A1 Advanced Conceptual Massing.....	A-6
Appendix B Skills Assessment.....	B-1
B.1 Skills Assessment	B-3
Index.....	Index-1

PROPERTY OF ASCENT
866-527-2368