COURSE OUTLINE

CONTINUING EDUCATION
TECHNOLOGY

COURSE NAME: **Revit Architecture III**

COURSE CODE: **CADE 9134**

CREDIT HOURS: **36**

PREREQUISITES: **CADE 9133 - Revit Architecture II**

EFFECTIVE DATE: **Sept. 01, 2016**

TEACHER:

PHONE: **416-415-5000, ext. 4861** **EMAIL:** **cetechnology@georgebrown.ca**

PLAR ELIGIBLE: **YES (X) NO ( )**

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ORIGINATOR:_____
SIGNATURE **DATE**

CHAIR:_____
SIGNATURE **DATE**

DATE OF REVISION:_____

EQUITY STATEMENT: **George Brown College values the talents and contributions of its students, staff and community partners and seeks to create a welcoming environment where equity, diversity and safety of all groups are fundamental. Language or activities which are inconsistent with this philosophy violate the College policy on the Prevention of Discrimination and Harassment and will not be tolerated. The commitment and cooperation of all students and staff are required to maintain this environment. Information and assistance are available through your Chair, Student Affairs, the Student Association or the Human Rights Advisor.**

George Brown College is dedicated to providing equal access to students with disabilities. If you require academic accommodations visit the Disability Services Office or the Deaf and Hard of Hearing Services Office on your campus.

STUDENT RESPONSIBILITIES: Students should obtain a copy of the *Continuing Education Course Guide* and refer to it for additional information regarding the grading system, withdrawals, exemptions, class assignments, missed tests and exams, supplemental privileges, and academic dishonesty. Students are required to apply themselves diligently to the course of study, and to prepare class and homework assignments as given. Past student performance shows a strong relationship between regular attendance and success.

COURSE DESCRIPTION:

This advanced level course will teach students how to use formula-driven design to create dynamic building models. Adaptive Components, Custom Curtain Walls, Advanced Detailing, Schedules, Key Notes, Legends, Phasing, and Design Options will be taught.

COURSE OUTCOMES:

1. Create Detail Component Families in the Family Editor
2. Create Dynamic Formula-driven building models.
3. Create Custom Curtain Walls
4. Create 2D Details with custom detail components
5. Create Schedules, Key Notes, and Legends
6. Apply Phasing and Design Options to a Building Project

DELIVERY METHODS:

The delivery format of this course is DVD based video lectures and demonstrations with supplemental notes, samples, and other support files delivered electronically through internet access. Support is facilitated through email and website access.

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

Required Text (PDF)

Revit Architecture 3 - Handbook 2014
by Kevin Brown

Required Study Aid

Revit Architecture 3 – Course DVD set 2014
by Kevin Brown

TESTING POLICY:

There are no formal tests in this course. The Course Evaluation is based entirely on assignments.

ASSIGNMENT POLICY:

1. There are three assignments, each of which will be clearly delineated in handouts. Students are to submit all assignments within their course duration.
2. Assignments to be submitted within the course duration of 90 days. Late assignments received after the 90 day period end will be penalized 10% for each week they are late. Assignments will not be accepted later than 4 weeks past the final day in the course duration.

EVALUATION SYSTEM:

Assignment #1 – 35%	Due:	Class 4
Assignment #2 – 35%	Due:	Class 8
Assignment #3 – 30%	Due:	Class 12

GRADING SYSTEM

The passing grade for this course is: 60%

A+	**90-100**	**4.0**	**B+**	**77-79**	**3.3**	**C+**	**67-69**	**2.3**	**D+**	**57-59**	**1.3**	**Below 50**	**F**	**0.0**
A	**86-89**	**4.0**	**B**	**73-76**	**3.0**	**C**	**63-66**	**2.0**	**D**	**50-56**	**1.0**			
A-	**80-85**	**3.7**	**B-**	**70-72**	**2.7**	**C-**	**60-62**	**1.7**						

Excerpt from the College Policy on Academic Dishonesty:
The *minimal* consequence for submitting a plagiarized, purchased, contracted, or in any manner inappropriately negotiated or falsified assignment, test, essay, project, or any evaluated material will be a grade of zero on that material.
To view George Brown College policies please go to www.gbrownc.on.ca/policies

TOPICAL OUTLINE:

Topic	Outcome	Content	Chapter/ Reference
01	1,2	Dimensioning forms in the Conceptual Design Environment and developing Dynamic, complex masses with Formulas and Parameters.	Handout
02	1,2	Creating and working with Pattern Component families.	Handout
03	1,2	Creating and working with Adaptive Components, reference points and stitched border panels.	Handout
04	1,3	Creating typical Curtain Walls and working with curtain grids and layouts.	Handout
05	1,3	Creating and working with Curtain Wall panels, Curtain Wall mullions, corner mullions, and mullion join conditions.	Handout
06	1,3	Creating and working with Custom Curtain Wall mullions, custom Curtain Wall panels, and developing Custom curtain wall assemblies with nested curtain walls and custom parametric panels.	Handout
07	5	Creating and working with Schedule Views and Schedule View properties.	Handout
08	5	Creating and working with Legend Views, Tags, and Keynotes.	Handout
09	1,4	Introduction to Detailing Components. Working with insulation, detail lines and custom components.	Handout
10	1,4	Advanced Detailing Tools. Working with hidden lines, draw order, and cut profiles.	Handout
11	6	Phasing and Phase Filters. Working with Project phasing tools.	Handout

12	6	Design Options. Using Design Options to explore multiple design solutions for a single project.	Handout

DVD Training Video Index

REVIT 3 –Lesson 01 71 minutes **Disk 2**

1- Dimensioning Forms in the Conceptual Design Environment (00.00)
2- Using Parameters and Formulas with Conceptual Masses (12:18)
3- Practice Exercise – Formula Complex – Parametric Mass (23:38)
4- Assignment 3 – Formula Complex – Complex Tower (37:48)

REVIT 3 –Lesson 02 61 minutes **Disk 2**

1- Creating Pattern Component Families (00:00)
2- Applying and Modifying Pattern Component Families (24:55)
3- Assignment 1 – Pattern Component Families (41:28)
4- Assignment 1 – Alternate Panel Types in Component Families (65:58)

REVIT 3 –Lesson 03 51minutes **Disk 2**

1- Creating and Working with Reference Points (00:00)
2- Adaptive Points and Stitching Border Panels (15:38)
3- Adaptive Components (30:08)
4- Assignment 1 – Stitching Border Panels & Adaptive Components (45:38)

REVIT 3 –Lesson 04 71 minutes **Disk 2**

1- Creating Typical Curtain Walls (00:00)
2- Working with Curtain Grids and Layouts (16:48)
3- Assignment 2 – Center Square –Curtain Walls I (37:38)

REVIT 3 –Lesson 05 95 minutes **Disk 1**

1- Creating and Working with Curtain Wall Panels (00:00)
2- Curtain Wall Mullions, Corner Mullions, and Join Conditions (17:12)
3- Assignment 2 – Center Square –Curtain Walls II (39:18)
4- Assignment 2 – Center Square –Curtain Walls III (59:38)

REVIT 3 –Lesson 06 106 minutes **Disk 1**

1- Custom Curtain Wall Mullions (00:00)
2- Custom Curtain Wall Panels (12:18)
3- Assignment 2 – Center Square –Curtain Walls IV (28:18)
4- Assignment 2 – Center Square –Curtain Walls V (43:38)
5- Assignment 2 – Center Square –Curtain Walls VI (63:58)

REVIT 3 –Lesson 07 102 minutes **Disk 02**

1- Introduction to Schedule Views (00:00)
2- Specifying Schedule Properties (11:58)
3- Modifying Schedules and Adding Schedules to Sheets (37:13)
4- Practice Exercise – Door Schedule (51:43)

REVIT 3 –Lesson 08 86 minutes **Disk 02**

1- Legend Views (00:00)
2- Tags (13:23)
3- Keynotes (29:58)
4- Practice Exercise – Tags, Keynotes, and Legends (50:23)

REVIT 3 –Lesson 09 83 minutes **Disk 03**

1. Advanced Detailing Methods (00:00)
2. Detail Components (13:17)
3. Line-Based and Repeating Components (25:28)
4. Detailing Assignment Part I (36:20)
5. Detailing Assignment Part II (59:40)

REVIT 3 –Lesson 10 100 minutes **Disk 03**

1- Detail Lines and Insulation tools (00:00)
2- Filled Regions and Masking Regions (14:30)
3- Draw Order, Hidden Lines, and Cut Profiles (23:40)
4- Detailing Assignment Demonstration (42:40)

REVIT 3 –Lesson 11 67 minutes **Disk 03**

1- Project Phasing (00:00)
2- Phase Filters and Graphic Overrides (16:10)
3- Infill Elements and Demolishing Elements (31:00)
4- Phasing Practice Part I (38:20)
5- Phasing Practice Part II (55:30)

REVIT 3 –Lesson 12 45 minutes **Disk 03**

1- Introduction to Design Options (00:00)
2- Creating and Working with Design Options (12:12)
3- Design Options – Practice Exercise (27:28)