

CADD06021 2022 Building Information Modelling With Revit Architecture

Full Title	Building Information Modelling With Revit Architecture			
Transcript Title	Bim With Revit Architecture			
Status	IB - Uploaded to Banner Module Code CADD06021			
NFQ Level	06	ECTS Credits	10	
Subject Area	CADD - Computer Aided Design	Attendance	N/A %	
Grading Mode	Numeric/Percentage	Module Duration	Semester - (15 Weeks)	
Start Term	2022 - Academic year 2022-2023	End Term	9999 - The End of Time	
Module Leader	Paul Vesey	Department	D510 - Built Environment	

Module Description

The programme will provide learners with a solid grounding in Building Information Modelling (BIM) using Autodesk's Revit Architecture. This programme will encompass the basics of 3D building modelling & architectural visualisation. BIM functionality such as tables and building quantities will also be covered. This course will benefit existing AutoCAD users as well as those learning CAD for the first time.

≡	Learning Outcomes On completion of this module the learner will/should be able to;
1.	Produce multi-view, isometric, and oblique drawings.
2.	Produce plan views; elevations, and sections of small to medium sized buildings.
3.	Edit existing CAD drawings.
4.	Produce Revit generated material schedules and take-off lists
5.	Use Revit to create presentation graphics and renderings

Indicative Syllabus

Overview of Revit Architecture and Building Information Modelling (BIM)

Key Concepts; Project File; Introduction to BIM; BIM Workflow.

User Interface, Views and Revit Project Setup

Level setup; Site topography; Standard Building Elements; Column Grids and Structural Layouts.

Elements and Element Properties

Walls; Roofs; Floors; Vertical Circulation; Ceilings.

Families: Editing, and Creating

Types of Families; Accessing Standard Families and Customisation.

Detailing & Annotation

Sections Views; Detail Views; Annotation and Editing.

Schedules, Quantities and Tags

 $Window\ Schedules;\ Door\ Schedules;\ Material\ Take-offs;\ Room\ Tags;\ Querying\ Building\ Data.$

Shading, Rendering and Animation

3D Views & Cameras; Materials; Lighting; Walkthroughs; Solar Studies.

Teaching and Learning Strategies

The module is delivered using the latest version of Autodesk Revit Learners will be guided through the functionality of Revit through examples and demonstrations.

Module Assessment Strategies

Learners must achieve at least 40% in the module. There is no terminal examination. The module is 100% assessed by continuous assessment of laboratory/workshop based assignments and interim assessments.

Repeat Assessment Strategies

The repeat opportunity is by means of:

- re-taking failed practical assessments
- · repeat and attend the module.

Programme Membership

LC_JBIAP_RMY 202200 Certificate in Building Information Modelling with Revit Architecture (Classroom)

Individual Project

LC_JBIAP_ROL 202200 Certificate in Building Information Modelling with Revit Architecture (Online)

Coursework / Continuous Assessment Breakdown

Continuous

Assessment

Coursework & Continuous Assessment 100 % End of Semester / Year Formal Exam 0 %	
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Coursework Assessment Outcomes Title Failed Element Type Form Percent Week Assessed Domestic House Continuous Individual Project No 34 % Week 4 1,2,3,4 Design Assessment Continuous Retail Unit Design Individual Project No 33 % Week 8 1,2,3,4,5 Assessment

33 %

Week 10

1,2,3,4,5

No

Full Time Mode Workload						
Туре	Location	Description	Hours	Frequency	Avg Workload	
Laboratory Practical	Computer Laboratory	Lab Practical	3	Weekly	3.00	
Independent Learning	Not Specified	Independent Learning	155	Per Module - Semester	10.33	

Total Full Time Average Weekly Learner Contact Time 3.00 Hours

Module Resources

Mass, Analysis and

Renders

Journal Resources	
Computer Aided Geometric Design	ISSN 0167-8396
Computer Aided Design	ISSN 0010-4485
The Journal of Architecture	ISSN 1360-2365
Building and Environment	ISSN 0360-1323

URL Resources

http://www.autodesk.com/education/home

http://www.nationalbimlibrary.com/

http://www.revitcity.com/

https://www.bimstore.co.uk/

http://www.polantis.com/

Other Resources

Software:

Latest Edition of Autodesk Revit

Required Book List

Cover Book Details

Robert, M., (2019). Mastering Autodesk Revit 2020. . John Wiley & Sons. 1988 9781119570127 ISBN-13 1119570123



Karen, D., (2014). Building Information Modeling. . John Wiley & Sons.

ISBN 9781118766309 ISBN-13 111876630X



i, F., (2020). *Revit Essentials for Architecture*. . G3b Press. 0578731061 ISBN-13 9780578731063



Rafael, C., (2018). BIM Handbook. . John Wiley & Sons.

9781119287537 ISBN-13 1119287537



Administratve Information		
Date Created	16-06-2021	
Module Owner	Paul Vesey	
Date School Approved	18-05-2022	
Module Approver	Ciara Naughton	
Date Academic Council Approved	18-05-2022	