

PART 5: ADVANCED TOOLS



39-SCHEDULES



40-PHASES



41-WORKSETS



42-GROUPS



43-MODEL
IN-PLACE



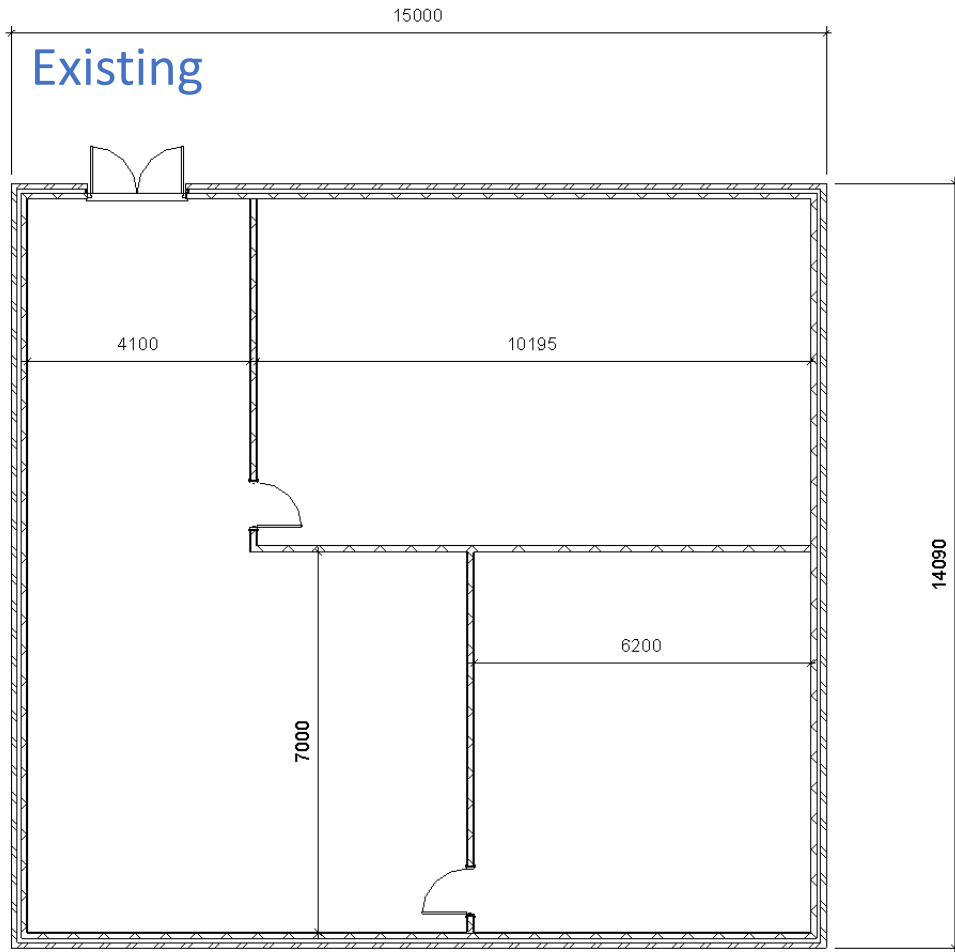
44-FAMILIES



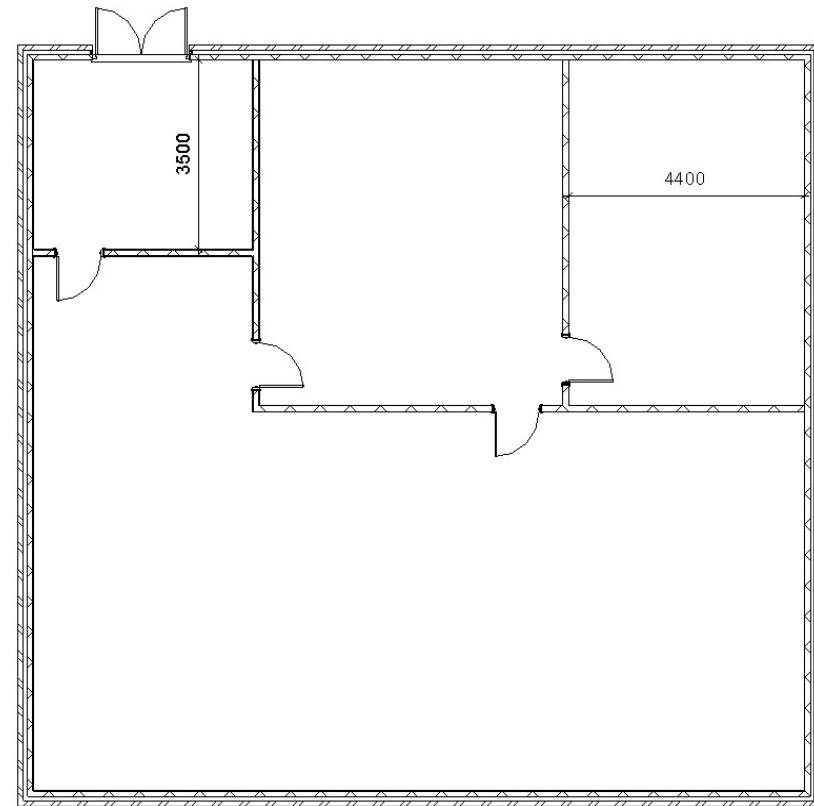
45-DESIGN
OPTIONS

Phasing in Revit 'Exercise'

Revit enables you to show both existing and proposed plans using Phasing.



Proposed



Manage



Phases
Phasing



Phasing

Project Phases Phase Filters Graphic Overrides

PAST

	Name	Description
1	Existing	
2	New Construction	

Insert

Before

After

Combine with:

Previous

Next

Phasing

Project Phases Phase Filters Graphic Overrides

	Filter Name	New	Existing	Demolished	Temporary
1	Show All	By Category	Overridden	Overridden	Overridden
2	Show Complete	By Category	By Category	Not Displayed	Not Displayed
3	Show Demo + New	By Category	Not Displayed	Overridden	Overridden
4	Show New	Overridden	Overridden	Overridden	Not Displayed
5	Show Previous + Demo	Not Displayed	Overridden	Overridden	Not Displayed
6	Show Previous + New	By Category	Overridden	Not Displayed	Not Displayed
7	Show Previous Phase	Not Displayed	Overridden	Not Displayed	Not Displayed

New Delete

OK Cancel Apply Help

Phasing

Project Phases Phase Filters Graphic Overrides

Phase Status	Projection/Surface		Cut		Halftone	Material
	Lines	Patterns	Lines	Patterns		
Existing				Hidden	☐	Phase - Exist
Demolished				Hidden	☐	Phase - Demo
New					☐	Phase - New
Temporary					☐	Phase - Temporary

OK Cancel Apply Help

Phasing in Revit

Revit enables you to show both existing and proposed plans using Phasing Filters and Graphical Overrides

Existing

Floor Plan

Floor Plan: Level 0 existing floor plan ▾ Edit Type

Depth Clipping

No clip

Identity Data

View Template

<None>

View Name

Level 0 existing floor p...

Dependency

Independent

Title on Sheet

Referencing Sheet

Referencing Detail

Phasing

Phase Filter

Show All

Phase

Existing

Proposed

Floor Plan

Floor Plan: Level 0 proposed floor pl ▾ Edit Type

Depth Clipping

No clip

Identity Data

View Template

<None>

View Name

Level 0 proposed floo...

Dependency

Independent

Title on Sheet

Referencing Sheet

Referencing Detail

Phasing

Phase Filter

Show Complete

Phase

New Construction

Works Plan

Floor Plan

Floor Plan: Level 0 works plan ▾ Edit Type

Depth Clipping

No clip

Identity Data

View Template

<None>

View Name

Level 0 works plan

Dependency

Independent

Title on Sheet

Referencing Sheet

Referencing Detail

Phasing

Phase Filter

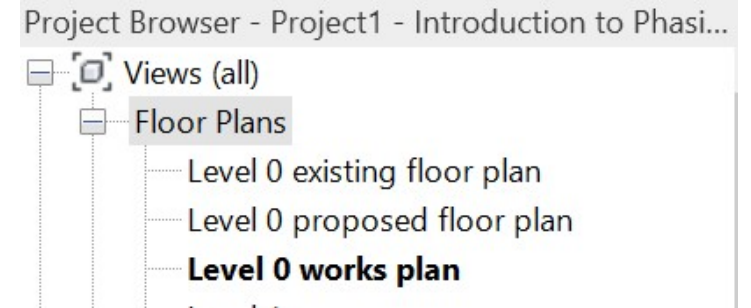
Show New

Phase

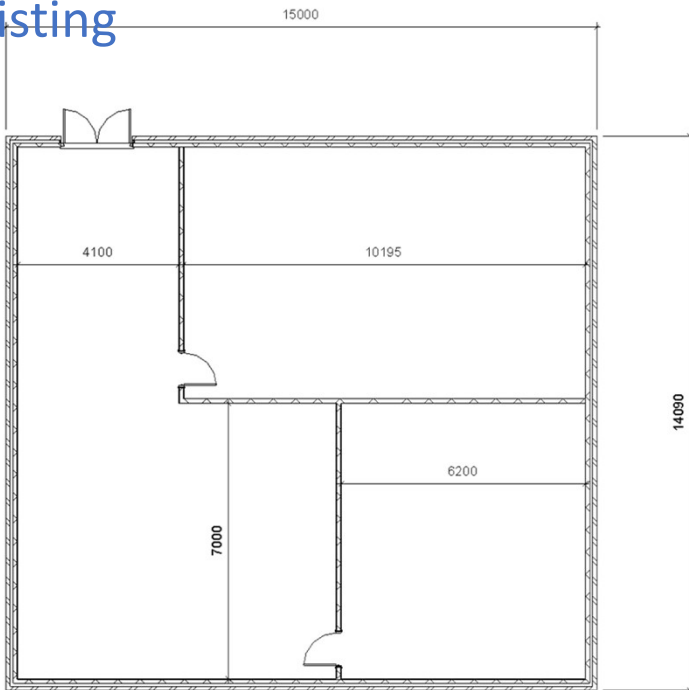
New Construction

Phasing in Revit

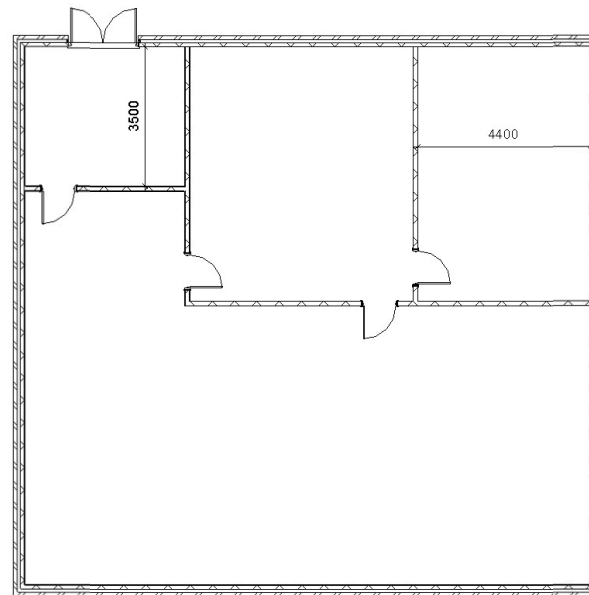
Revit enables you to show both existing and proposed plans using Phase Filters and Graphical Overrides



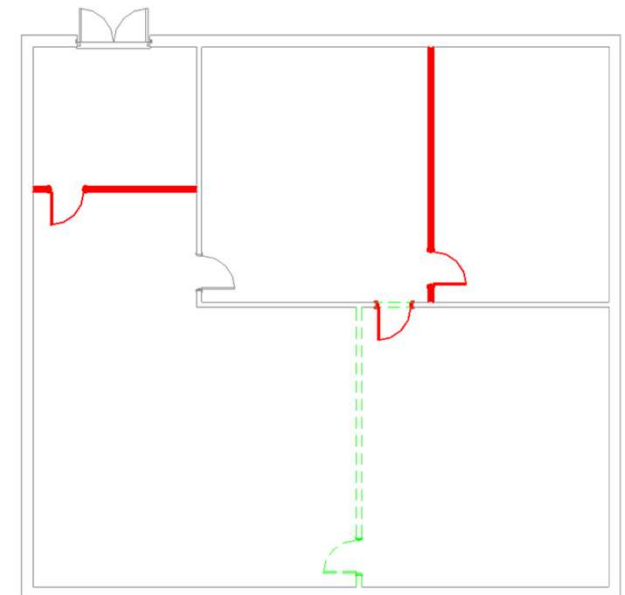
Existing



Proposed



Works Plan



Assessment 1

Submission
deadline:

5th May 2025

Module Learning Outcomes (from module syllabus)

Learning Outcomes:

- Produce 3D models using industry-standard software applications.
- Evaluate different sources of information so as to prepare Building Information Models using industry standard software.



APPENDIX GA36a

LEVEL 4 ASSESSMENT SPECIFICATION

Student name:		Student ID number:	
Programme:	BScHND/HNC Civil Engineering BScHND/HNC Construction Management BScHND/HNC Quantity Surveying		
Module:	Digital Technology BIM		
Module code:	ACBA 4018	Contribution to Overall Module Assessment (%):	100
Lecturer:	Gavin Traylor	Internal Verifier:	Dr Hannah Williams
Assignment Title:	3D Modelling using Revit	Word count (or equivalent):	2,000 words with drawings
Submission deadline:	5 th May 2025	Return date of provisional marks & written feedback:	02 June 2025
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): N/A Late submission of the assessment will result in a late penalty mark: Work which is submitted up to 1 week late will be capped at 40% for the first attempt and will be awarded a mark of 0% for re-assessment. Late submission penalties may be lifted only if there is an approved extenuating circumstances claim. Work submitted more than 1 week late will be considered as a non-submission and will not be marked. The work may be considered as a submission for reassessment if offered by an Examining Board or if there is an approved extenuating circumstances claim.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Assessment 1

Submission
deadline:

5th May 2025

Intelligent Modelling A1 Digital Submission: (weighting 100%)

Scenario:

You have been approached by a client who wishes to remodel their house.

They have provided you with a set of 2D CAD drawings prepared when they purchased the house and have asked you to prepare a design to remodel and extend the property.

Assessment 1

Submission
deadline:

5th May 2025

They would like you to consider providing:

The clients have an elderly parent who will be moving into the property requiring a new fully accessible bedroom, ensuite accessible bathroom and adjacent dressing room.

The clients are both horticulturalists and require a home office for two people and a sun room with views to the garden, complete with orangery for tropical plants, potting area with storage.

You should convert the 2D drawings into a 3D intelligent model using Revit.

Prepare a set of existing & proposed drawings of the property that includes:

Site Location Plan @1:1250

Existing Site Plan @ 1:500

Existing Floor Plans@ 1:100

Proposed Site Plan @ 1:500

Proposed Floor Plans @ 1:100

Proposed Elevations @ 1:100

Proposed Long and Short Section @ 1:50

Proposed Section Callout Detail @ 1:5

Proposed Visualisation. (NTS)

Assessment 1

Submission
deadline:

5th May 2025

The project must include. Project Base point. Room names, Legends, Tags & Annotations, Dimensions, Levels, North Point. Project Phasing in Revit is recommended but not essential.

All Drawings must be appropriately scaled at A1 size and presented in the **uwtsd BIM titleblock format with the appropriate naming conventions.**

Digital Submission required in RVT and PDF format.

PDF to be uploaded to Turnitin with RVT files emails to the tutor on the date of submission

Assessment 1

Guidance specific to this assessment:

Utilise the exercises and videos as part of the lecture series. These are specifically designed to develop the skills required to answer the questions.

Submission
deadline:

5th May 2025

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
2. Knowledge and Understanding Skills		
3. Cognitive and Intellectual Skills		
4. Practical Application Skills		
Use of the BIM naming and format, including completion of the Splash Page and all <u>titleblocks</u> . (15) Demonstrating your skills in Revit, organising your work – views, sheets, PDF outputs (25) Drawings provided at an appropriate scale, detail and presentation format. (25) Project Base Point, Rooms names, Legends, Tags and Annotations, Dimensions, Levels, North Point. True North/Project North (25) Adherence to the brief and Design Intent (10)	100	
5. Transferable Skills for Life and Professional Practice		

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)	%
	Up to 1 week late (40% Max)	
	Over 1 week late (0%)	

Assessment 1

Submission
deadline:

5th May 2025

Assessment 2 Weighting 100%

•	Use of the BIM naming and format, including completion of splash page and all titleblocks.	15
•	Demonstrating skills in Revit, and organise your work accordingly – views and sheets, PDF outputs	25
•	Drawings provided at an appropriate scale, detail and presentation format.	25
•	Project Base point. Room names, Legends, Tags & Annotations, Dimensions, Levels, North Point. (Project Phasing in Revit is recommended).	25
•	Adherence to brief and Design intent. The clients have an elderly parent who will be moving into the property requiring a new fully accessible bedroom, ensuite accessible bathroom and adjacent dressing room. The clients are both horticulturalists and require a home office for two people and a sunroom with views to the garden, complete with orangery for tropical plants, potting area with storage.	10

4. Practical Application Skills

100

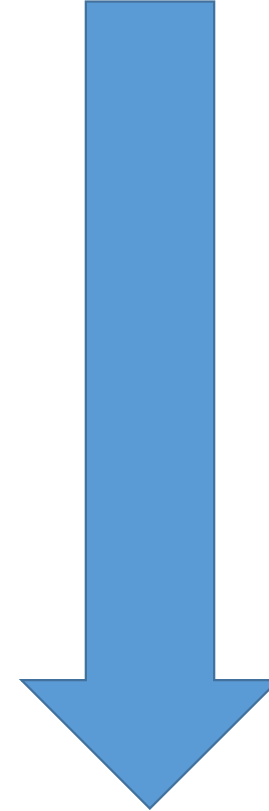




Submission
deadline:

5th May 2025

- Start a new project in REVIT
- Set up levels
- Insert CAD OSMAP in site view
- Set up project north
- Insert CAD plans to appropriate level views
- *Set up phasing **
- Reposition project base point
- Load Splash Page Titleblock
- Load UWTSD Titleblock



NOW START DRAWING