

**TUS**

Technological University of the Shannon:
Midlands Midwest
Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre Iarthar Láir

Subject:	CADD06020 - Revit MEP
Course:	Building Information Modelling with Revit MEP
Session:	Autumn 2022
Lecturer:	Paul Vesey BEng, MIE, HDip
Filename:	RMEP03-TUS-XX-XX-SP-M-0001-A1-P04

Assignment 3 – Pipe Systems

Issue Date:	4 th October 2022
Submission Date:	27 th November 2022

Continuous Assessment Marks

This assignment will account for 25% of the 100% allocated for continuous assessment in this module

This assignment will examine the following learning outcomes:

No.	Learning Outcome	Assessed
1	Create and analyse Duct layouts in Revit MEP	No
2	Create and analyse Pipe Layouts in Revit MEP	Yes
3	Create and Analyse Electrical Layouts in Revit MEP	No
4	Co-ordinate Mechanical and Electrical Systems in Revit MEP	Yes

Excellent (70+%)	Faithful recreation of the original drawings with no errors, and shows improvements over the original drawing set
Good (56% to 69%)	Recreation of the original drawing set with some minor errors or omissions in presentation and modelling
Acceptable (40% to 55%)	Recreation of the original drawing set with numerous minor errors or omissions in presentation and modelling that could be addressed with minimal additional work
Poor (<40%)	Modelling incomplete, Views missing, Major Annotation Missing, general poor presentation of the design

Assignment Outline

You will start this assignment by creating a new Revit project based on the piping template. You will then have to link to the Architectural model for reference. You are required to model three pipe systems, one **Hydronic Supply** system and one **Hydronic Return** system and one **Fire Protection** system as depicted in the drawings that accompany this specification. In order to complete this work you will need to place appropriate sprinklers and radiators as shown on the drawings. The radiator family part has been provided to you. It will be necessary to modify its clearance parameters to effectively model the hydronic systems. You will also need to create view filters for the Fire System as Revit the standard template does not provide one. You will also have to set the view range parameters as necessary. You are also required to create three (3) A1 drawing sheets using the LIT title block provided. These sheets should be populated with the views and schedules as shown. Pipe schedules and are to be placed on the appropriate sheets. All drawings sheets and views are to be replicated in your assignment. You will also need to make use of the tagging functionality in Revit as necessary.

The asset pack for this assignment contains the following items:

1. LIT Title-block
2. Revit Architectural Model
3. Completed Drawings in pdf format
4. Radiator Family sourced from the NBS
5. Pipe Accessory Tag Family File

Submission

Upon completion, upload your Revit project file, the architectural model, and a pdf of your drawing to Microsoft Teams on or before the submission deadline.

Upload Checklist

Item	Format	Filename
Revit File	Revit Project File	RMEP03-***.XX-ZZ-M3-M-0001-A1-P01.rvt
A1 Drawing	Adobe pdf	RMEP03-***.XX-ZZ-DR-M-0001-A1-P01.pdf
A1 Drawing	Adobe pdf	RMEP03-***.XX-ZZ-DR-M-0002-A1-P01.pdf
A1 Drawing	Adobe pdf	RMEP03-***.XX-ZZ-DR-M-0003-A1-P01.pdf