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CADD06020 2022 Building Information Modelling With Revit Mep

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CADD06020 2022

Building Information Modelling With Revit Mep

Full Title	Building Information Modelling With Revit Mep		
Transcript Title	Bim With Revit Mep		
Status	IB - Uploaded to Banner	Module Code	CADD06020
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

To provide learners with the concepts, knowledge and techniques to successfully operate Revit MEP tools in a design and construction context.

Learning Outcomes *On completion of this module the learner will/should be able to;*

1. Create and analyse duct layouts in Revit MEP
2. Create and analyse Pipe Layouts in Revit MEP
3. Create and Analyse Electrical Layouts in Revit MEP
4. Co-ordinate Mechanical and Electrical Systems in Revit MEP

Indicative Syllabus

MEP workflow and establishing an appropriate workspace

View Templates. Browser Organisation and Customisation, Systems Browser, Component Hosting

Pipe Systems & Duct Systems

Pipe system creation, Pipe types, Fitting types, System Presentation, Revit Pipe System Checker, and Pressure Loss reporting tool. Duct system creation, Duct inspector, System Presentation, Revit Duct System Checker and Pressure Loss reporting tool. Component Listing.

Electrical Systems

Simple Circuit Creation, Simple Switch System Creation, System Presentation, Panel Scheduling, Revit Circuit Checking.

Containment Creation, Editing, and Materials Takeoffs

BIM Interoperability

Spatial Data, Equipment Data, UniClass 2015 Classifications, COBie tools.

BIM in Standards & Context

ISO19650 Standards and Implementation. Organisation Information Requirements (OIR), Asset Information Requirements (AIR), Project Information Requirements (PIR), Exchange Information Requirements (EIR), Asset Information Model (AIR), Project Information Model (PIM), BIM Execution Plan (BEP),

Teaching and Learning Strategies

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.

Module Dependencies

Prerequisite Modules

Candidates should possess a working knowledge of Revit Architecture, or have taken 'BIM with Revit Architecture' or similar

Programme Membership

LC_JBIRP_ROL 202200 Certificate in Building Information Modelling (Revit MEP)

Coursework / Continuous Assessment Breakdown

Coursework & Continuous Assessment	100 %	End of Semester / Year Formal Exam	0 %
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Coursework Assessment						
Title	Type	Form	Failed Element	Percent	Week	Outcomes Assessed
Duct System Design	Continuous Assessment	Individual Project	No	25 %	To be decided	1,4
Pipe System Design	Continuous Assessment	Individual Project	No	25 %	To be decided	2,4
Electrical System Design	Continuous Assessment	Individual Project	No	25 %	To be decided	3,4
MEP Co-ordination	Continuous Assessment	Individual Project	No	25 %	To be decided	1,2,3,4

Full Time Mode Workload					
Type	Location	Description	Hours	Frequency	Avg Workload
Laboratory Practical	Computer Laboratory	Lab Based Teaching	3	Weekly	3.00
Independent Learning	Not Specified	Self Directed Learning	60	Per Module - Semester	4.00
Directed Learning	Not Specified	Directed Learning	40	Per Module - Semester	2.67

Total Full Time Average Weekly Learner Contact Time 5.67 Hours

Module Resources







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 MEP Journals: Computer Aided Geometric Design ISSN 0167-8396 Computer Aided Design ISSN 0010-4485 The Journal of Architecture ISSN 1360-2365

Additional Information

None

Recommended Book List

Cover	Book Details
	Whitbread, S., (2015). <i>Mastering Autodesk Revit MEP 2016: Autodesk Official Press</i> . Sybex.
	McCann, M., (2016). <i>Revit MEP Essentials - McCann's Training Guide (Building Information Modelling Training Guides)</i> . . McCann's BIM Guides. ISBN 0995483108 ISBN-13 9780995483101
	, A., (2016). <i>Autodesk Revit 2017 (R1) MEP: Fundamentals - Metric: Autodesk Authorized Publisher</i> . ASCENT, Center for Technical Knowledge. ISBN 1943184453 ISBN-13 9781943184453
	, A., (2016). <i>Autodesk Revit 2017 (R1) BIM Management: Template and Family Creation - Metric: Autodesk Authorized Publisher</i> . . ASCENT, Center for Technical Knowledge. ISBN 1943184496 ISBN-13 9781943184491
	Tickoo, P., (2015). <i>Exploring Autodesk Revit MEP 2016, 3rd Edition</i> . CADCIM Technologies.
	Publisher, A., (2017). <i>Autodesk Revit 2018 MEP Fundamentals - Metric</i> . ASCENT, Center for Technical Knowledge. ISBN 1946571539 ISBN-13 9781946571533

Administrative Information	
Date Created	28-05-2021
Module Owner	Paul Vesey
Date School Approved	18-05-2022
Module Approver	Ciara Moloney
Date Academic Council Approved	18-05-2022