

BDAZ / BDPZ

Certificate in Building Information Modelling (BIM) Data Management with Dynamo

建築信息模擬Dynamo數據管理證書

This is a training course focusing on introducing how to use Dynamo.

本培訓課程重點介紹使用Dynamo的方法。

	BDAZ	BDPZ
Lecturer 講師	Professionals 專業人士	
Medium of Instruction 授課語言	Cantonese supplemented with English technical terms 廣東話輔以英文技術用語 Only English version of the course materials and computer software is used for teaching in class 本課堂以英文版本的教材及電腦軟件教學 Only English versions of assignments and examination papers will be used for assessment in class 本課堂採用英文版本習作及考試卷作評核	
Mode of Attendance 授課形式	Part-time day course 日間部份時間制： 09:00-16:00	Part-time evening 夜間部份時間制： 19:00-22:00
Duration 授課期	6 hours x 4 sessions 6小時 x 4堂	3 hours x 8 sessions 3小時 x 8堂
Award of Certificate 證書頒發	1) Completion Certificate (i) Attended 21 hours or above; (ii) Submit all continuous assessments (iii) Completed and passed final assessments (iv) Obtained 50 marks or above for the programme average. 2.) Certificate of Attendance – Attended 21 hours or above. 1) 結業證書 (i) 出席課程21小時或以上； (ii) 完成所有持續評核； (iii) 完成期末評核及取得合格成績； (iv) 取得課程平均分50分或以上。 2) 出席證書 – 出席課程21小時或以上	1) Completion Certificate (i) Attended 21 hours or above; (ii) Submit all continuous assessments (iii) Completed and passed final assessments (iv) Obtained 50 marks or above for the programme average. 2.) Certificate of Attendance – Attended 21 hours or above. 1) 結業證書 (i) 出席課程21小時或以上； (ii) 完成所有持續評核； (iii) 完成期末評核及取得合格成績； (iv) 取得課程平均分50分或以上。 2) 出席證書 – 出席課程21小時或以上
Re-Exam 補考	The course offers only one re-exam opportunity. The fee for the re-exam is HK\$100. 課程僅提供一次補考機會，補考費用為港幣\$100元。	
Venue 上課地點	HKIC Kowloon Bay Campus, 44 Tai Yip Street, Kowloon Bay, Kowloon 九龍 九龍灣大業街 44 號香港建造學院九龍灣院校	
Admission Requirements 入學條件	Basic knowledge of Revit. 具備基本的Revit知識。	
Course Fee 課程費用	\$5,300.00	
Enquiry 查詢課程	2100 9000 / 2100 9526	
Application Method 報名方法	BDAZ / BDPZ Please submit your online application through the course website. 請透過課程網站提交網上申請。	

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Course Content 課程內容

1 - Revit Element Modification

Introduction to Dynamo

- 1.1 Understand the concepts of linking Dynamo to Revit instance parameters
- 1.2 Link parameters to create constraints
- 1.3 Apply visual programming to conceptual massing objects

2 - Revit Element Creation

Adaptive family, Listing levels and hands-on exercise

- 2.1 Create organization layout tools through visual programming
- 2.2 Rationalize an existing Revit surface for placement of solar panel families through visual programming
- 2.3 Construct points on vertical planes for arraying a 3 point Revit adaptive component
- 2.4 Apply visual scripting to building documents tasks

3 - Importing Fundamental Data

Geometry in Dynamo and hands-on exercise

- 3.1 Create organizational layout tools through visual programming.
- 3.2 Rationalize external geometry from a SAT file through visual programming.
- 3.3 Construct horizontal and vertical planes to create boundaries for creating native Dynamo geometry.
- 3.4 Export Dynamo geometry for use in Revit or other applications.

4 - Working With Different File Types

Data Structure in revit and hands-on exercise

- 4.1 Understand how to mesh SAT geometry with Excel data to rationalize the SAT surface geometry to host adaptive components.
- 4.2 Apply raster image color values as an input for controlling the thickness parameter of adaptive components.

5 - Data Analysis & Visualization

Data Visualization

- 5.1 Apply visual programming to design analysis of adaptive component deviations
- 5.2 Export design analysis results to Excel for further analysis
- 5.3 Understand the concepts of visual programming for environmental design representation
- 5.4 Perform solar orientation analysis for the roof surface of a building

6 - Scripting

Code blocks

Python and Programming Logics

- 6.1 Understand the concepts of python scripting
- 6.2 Understand the potential of code blocks to consolidate the number of nodes needed to create a Dynamo graph

7 - Packages, Dynamo Player

- 7.1 Apply packages to simplify scripts
- 7.2 Run Scripts with Dynamo Players.

8 - Summary & Final Assessment