ACAT

Embodied Carbon Management and Application of CIC Carbon Assessment Tool (CAT)

建築物料的隱含碳管理及建造業議會碳評估工具應用

This programme aims to provide theoretical training for the industry practitioners of professional and technician levels in the field of sustainable construction that can enhance their capabilities in embodied carbon management and application of CIC Carbon Assessment Tool (CAT) in construction.

此課程旨為可持續建築領域的專業及技術人員提供理論培訓，以提升其對隱含碳管理及應用建造業議會碳評估工具的能力。

Lecturer 講師	Professionals 專業人士
Medium of Instruction 授課語言	Cantonese supplemented with English technical terms 廣東話輔以英文詞彙
Study Mode 課程制式	Part-time evening 夜間部份時間制：19:00-22:00
Duration 授課期	3 hours 3小時
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	i) Holder of a recognized certificate or equivalent qualification in building, construction, surveying, sustainability or equivalent discipline; and ii) At least 2 years' working experience in the construction industry or related fields; and iii) Have basic computer knowledge. i) 持有認可屋宇建造、建築、測量或可持續發展相關範疇的證書； ii) 具有至少兩年建造業或相關工作經驗；及 iii) 具備基本的電腦知識。
Award of Certificate 證書頒發	Attended 3 hours of the programme 出席3小時的課程
Course Fee 課程費用	$690
Enquiry 查詢課程	21009000 / 21009842
Application Method 報名方法	Please apply online on SPDC portal 請透過建造專業進修院校的 網上報名系統 報名

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Course Content 課程內容

Module 1 – Introduction

1. Global Trends, Standards and Incentives on Embodied Carbon
    - Climate Change and Built Environment Influences
    - What is Embodied Carbon
    - Built Environment Facts and Carbon Emissions
    - Advancing Net Zero
    - Global trend – Standards and Updates
    - Carbon Commitments in China and HK
    - ESG Reports
    - BEAM Plus and CIC Carbon Assessment Tool
    - BREEAM Infrastructure (formerly CEEQUAL) and CIC Carbon Assessment Tool
2. Objective and Scope of CIC Carbon Assessment Tool
    - CIC Sustainability Initiatives and Platforms
    - CIC CAT Overview
    - Purpose and Background
    - Assessment Boundary: Cradle to Site (A1 – A5)
    - What does A1 to A5 represent in CIC CAT?
    - Industry-wide Targeted Audience
    - Development of Localised Database
    - Carbon Assessment Tool & Outputs
    - Carbon Assessment Tool vs EMSD LCA Tool
3. Brief Functions of CAT
    - In Design Stage
        - Embodied Carbon Calculation – Material Use
        - Exclusions from the Scope
    - In Construction Stage
        - Site Impacts: Material Use and Site Impacts
        - Construction Stage Analysis
        - Specific Report Generation
        - CIC Green Product Certification (GPC)
4. Conclusion & Take Away

Module 2 – Planning & Design Optimisation

1. Carbon Reduction by Planning and Design
    - Embodied Carbon and Structural Design
    - Involvement from Each Party along Whole Development Life Cycle
    - Embodied Carbon Calculation – Material Use
    - Exclusions from the Scope
    - Structural Design Optimisation
    - Specification for Low Embodied Carbon
    - Modular E&M
    - Usage of BIM
    - Data Input
    - How Can CAT Represent Design Data
2. Carbon Reduction by Construction – Green Construction Management
    - Site Impacts: Material Use and Site Impacts
    - Typical Green Measures in Construction Site
    - Upfront Embodied Carbon Reduction in HK
    - Reducing Embodied Carbon of Materials
    - Construction Stage Calculations
    - Reducing Embodied Carbon in Concrete
    - Alternative Low Carbon Materials
    - Offset Construction
    - Project Performance Outputs
    - Design vs Construction Comparison
    - Construction Material Analysis
    - Temporary Electricity Supply
    - Avoiding Diesel Generators
    - Site Electricity Supply Alternatives
    - Electricity Storage Container
    - Specific Report Generation
3. Case Studies and Best Practices from Clients/ Consultants
    - Planning Stage: Town Planning
    - Design Stage: Low Carbon Steel & Concrete & Design Optimisation
    - BIM