

**Assignment 02 –
Green Building Assessment for THEi Chai Wan Campus**

[Submission deadline: **before 4 May 2018 (Fri)**]



Introduction

THEi Chai Wan campus is designed not just confining to the school community, but also extending to the natural environment and integrating with the neighbourhood. It is designed for a sustainable and interactive learning environment. The key green building services designs include:

- High efficiency fresh water-cooled VSD chillers
- Variable speed chilled water pumps
- Fan coil unit with permanent magnet motor
- Heat recovery wheel in AHU serving lecture theatre and multi-purpose hall
- Fresh air demand control for classroom floors
- Energy efficient lightings
- Solar hot water system for changing room
- Water saving fixtures and water efficient drip irrigation system
- Rainwater harvesting
- Building environmental project assessment dashboard
- Thermal comfort voting system
- Other green features

This assignment gives students the opportunity to understand the measurement and assessment principles of the most popular green building rating tool in Hong Kong, i.e., BEAM Plus. Students will be working in a small group, each of five to six (5 to 6), to select **at least four green features** which can be under any of the six assessment categories (i.e., SA, MA, EU, WU, IEQ and IA) or affect more than one category for academic study.

The findings should involve critical examination and evaluation of the selected green features and the measured and assessed procedure using the BEAM Plus.

Guidelines

1. Based on the BEAM Plus New Buildings V1.2, choose **at least four green features** for further study and analysis. Explain why you choose those green features. The reason might be included but not limited to your personal experience, the importance and urgency you believed or any other ideas.
2. The report should examine how the chosen green features fulfilled the BEAM Plus requirement, and how it was measured and assessed by BEAM Plus. The typical criteria and possible indicators should be evaluated. Literature study, reference search, site visit, field measurements, surveys, etc. may be conducted to develop the information.
3. Critical comments on the assessment aspects should be provided, and if appropriate, give suggestions or recommendations to clarify and/or improve them.
4. Utilize figures, charts and tables to enhance data presentation.

Submission

1. This is a group project, 5 to 6 students in each group and each group submit 1 report.
2. Each group report should not be **more than 20 A4 pages**, including text, figure, tables and references.
3. Group and submit via Moodle before the deadline.
4. Quote all sources of information properly, including books, papers, magazines and Internet web sites.
5. **Students making direct copy of the information in other publications (plagiarism), if found, will be disqualified.**

Assessment

The submission of the group project consists of fifteen (15) percent of the final course grade.

The general criteria for its assessment are given below.

- Quality of the content (5 marks)
- Report format and language (5 marks)
- Teamwork and report organisation (5 marks)

Useful Web Links:

1. BEAM Plus: <https://www.hkgbc.org.hk/eng/BEAMPlus.aspx>
2. BEAM Plus Online Exhibition, THEi Chai Wan Campus: <http://greenbuilding.hkgbc.org.hk/projects/view/28>
3. VTC News & Event: http://www.vtc.edu.hk/html/en/about/press_159.html
4. Hong Kong Green Building Council: <https://www.hkgbc.org.hk/eng/>
5. HK Green Building Technology Net: <http://gbtech.emsd.gov.hk/eindex.html>

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