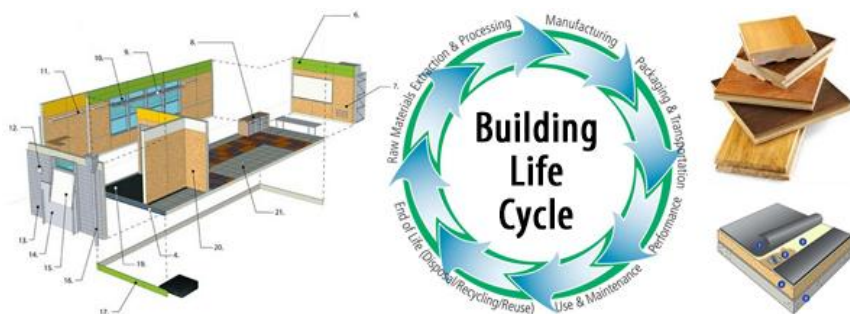




## Life Cycle Energy Assessment (LCEA) of Building Construction Course

### 課程簡介 Course Introduction

The main purpose of this course is to provide the participants with the fundamental principles, skills and guidelines needed to carry out effective LCA (Life Cycle Assessment) in accordance with the ISO 14040. After taking the course, the participants would appreciate the approach to identify LCA in construction including LCA analysis of construction materials, entire buildings, components and construction stages; identify LCC (Life Cycle Cost) and LCA of building materials and perform quantitative analysis to predict the energy savings, environmental and economic benefits. Moreover, the participants should be able to measure and verify the LCIA Environmental Impact Assessment and the performance of implemented Environmental Modeling of Construction (EMoC).



註：本學院將向「建築、工程及城市規劃專業委員會」申請將此講座納入持續進修活動時數認可，待其審批。

### 課程大綱 Course Outlines

#### Introduction to the Economic Analysis and Environmental Impact Assessment (EIA)

- Discussion of common economic analysis methods used to determine the cost effectiveness of energy efficiency measures.
- Life-cycle carbon emission analysis for energy efficiency measures.

#### LCA Modelling for Building Construction Processes

- Background of LCA Modelling
- Life-cycle Assessment
- Environmental Impact Assessment – Positive and Negative

#### Introduction to the Environmental Modelling of Construction (EMoC)

- Environmental Modelling of Construction (EMoC)
- Case Study
- Summary

#### Case Study and LCEA software rundown

- Examples and Case Studies using LCEA software for Building Construction Processes Projects
- How to use this LCEA model?
- Input data & Result worksheets to the model

## 教學對象 Target Audience

建造師及建築專業人士 Builders and Construction industry professionals

## 授課語言 Medium of Instruction

以廣東話講授，筆記以英文為主輔以中文資料 Delivered in Cantonese with notes mainly in English

## 報名地點 Venue for Enrollment

澳門氹仔偉龍馬路澳門科技大學 O 座二樓 持續教育學院

SCS, 2/F Block O, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau

## 上課地點 Venue for Class

澳門氹仔偉龍馬路澳門科技大學（確實地點將於確認開課時以手機短訊通知）

Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau

## 上課日期 Course Date & Time

課程編號 Course code : 1804260119-0	22 Sept 2018 – 13 Oct 2018	週六 Sat 10:00-13:00 14:00-18:00	總課時 28 小時 Total 28 hours
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課程費用 Tuition Fee MOP 5,500

收生名額 Class Size 16 人

## \* 報名注意事項 Enrollment Notes \*

報名時間：星期一至五(9:00 - 20:00)、星期六(9:00 - 13:00) [公眾假期除外]

1. 首次報讀本院短期課程者，請先登入網上報名系統（網址：<https://scs.must.edu.mo/oasc/PersonalInfo.do>）或掃描以下的 QR Code，選擇 **工程學和工程行業** 類別，預先登記個人資料（不需上傳身份證），填妥資料後，帶備身份證正、副本至本院辦理報名。

For those who enroll for our courses for the first time, please go to <https://scs.must.edu.mo/oasc/PersonalInfo.do> or scan the QR Code below, choose the category of **Engineering**, and input personal information (no need to upload ID copy). After registration online successfully, please come to our school to make payment. You should bring along with your ID card and copy.

2. 報讀者可以現金/本票或劃線支票（抬頭請寫“澳門科技大學持續教育學院”或“SCHOOL OF CONTINUING STUDIES MACAU UNIV. OF SCIENCE AND TECHNOLOGY”）繳付學費及材料費，**現金收費上限為澳門幣/港幣 5,000 元**。Tuition fee and materials fee (if any) should be paid by cash or by cheque/Cashier Order (Please make payable to “SCHOOL OF CONTINUING STUDIES MACAU UNIV. OF SCIENCE AND TECHNOLOGY”). **Cash is accepted for payment of not more than MOP5,000.**

3. 所有費用一經繳交，恕不退還（本院取消開辦該課程除外）或轉讓。  
All payment made is not refundable (except that the course is cancelled by the School) or transferable.

4. 如課程報名人數不足，本院保留課程取消或延期的權利。  
The School reserves the right to cancel or postpone the courses if minimum class size is not reached.



## 查詢 Enquiries

Tel: 8796 1998 Email: [scs@must.edu.mo](mailto:scs@must.edu.mo)

Website: <http://www.must.edu.mo/scs/diploma-certificate-programs>

持續教育學院致力開拓終身學習機會，如欲收到本學院之課程資料，可發電郵至 [scs@must.edu.mo](mailto:scs@must.edu.mo)，並提供閣下之電郵地址，標題主旨為“加入通知群組”。

The School of Continuing Studies develops life-long learning opportunities. Should you wish to receive information on our programs / courses, please send us an email (to [scs@must.edu.mo](mailto:scs@must.edu.mo)) stating your email address in your email and “Join the mailing list” in the Subject line.

我們亦為機構/政府部門/學校等提供內部培訓，按各機構不同之要求(主題/時間/地點/對象)而訂定培訓內容。請與我們聯絡。

We also offer in-house training for corporations/Government Departments/schools, tailor-made with respect to your choices of topics, time, place, and group of attendees. Please contact us for more information.