

# 澳門科技大學

MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY

# 持續教育學院

School of Continuing Studies



<u>運輸與公路工程</u>
Transportation and Highways Engineering

註:此課程已獲「建築、工程及城市規劃專業委員會」 (土木工程專業範疇)認可時數6小時。

# 課程簡介 Course Introduction

Transportation is an art. We have been trying to achieve a better mean to travel around in a safe and efficient manner ever since history was recorded. And yet it seems far from perfection. A seamless transportation and highways system is impossible but we are racing to break-through records, such as highspeed trains, Meglev, electric cars, etc.

In a modern city like Hong Kong and Macau both of which are a densely populated cities, the struggle to improve the transportation system never cease.

## 課程大綱 Course Outlines

The following topics will be covered with the aid of many short video to reflect the transportation and highways system in a modern city placing particular emphasis to the recent developments in Hong Kong, Macau and China:

- a. Introduction to transportation and highways engineering
- Application of scientific approach in planning, design, operation and management of transportation and highways system.
- b. Highways planning and construction

Principles of highways design to improve the standard of efficiency, safety, environmental and technologies in terms of innovations.

- c. Pavement material
- Overview of pavement in terms of design and construction. Comparison between flexible and rigid pavement with respect to different layers such as friction course, wearing course, road base and sub-base.
- d. Geometric design/ Junction Layout

The goal of geometric design and junction layout to maximize comfort, safety and economy on the one hand and to minimize impact to environment and properties on the other.

- e. Traffic engineering
- Importance of traffic engineering in relation to limited land, high and densely population both of which are characteristic of Hong Kong and Macau.
- f. Railways engineering

The development from steam train to diesel train and the big leap jump to high speed rail to Meglev in the past hundred years is staggering and beyond imagination, in particular China whom has shocked the world.

### 教學對象 Target Audience

執業土木工程師及建築專業人士 Civil engineers and construction professionals

#### 導師 Instructor

Engineer Professor in Civil & Geotechnical Engineering, parcticing Principal Engineering Consultant for International Mega Projects.

授課語言 Medium of Instruction To be conducted in English with Cantonese supplementary.

# 上課地點 Venue 澳門新口岸宋玉生廣場 335-341 號獲多利中心 11 樓

Alameda Dr. Carlos D' Assumpção 335-341, Hotline Centre, 11/F, Macau

# 上課日期 Course Date & Time

Class A. 30 <sup>th</sup> July 2017	週日 Sun 10:00-13:00 14:00-17:00	課程編號 Course code: \$170400082	總課時 6 小時 Total 6 hours
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# 課程費用 Tuition Fee MOP 1,200

收生名額 Class Size 30 人

\* 澳門科技大學持續教育學院為英國特許屋宇工程師學會學術合作夥伴。The School of Continuing Studies, MUST is an Academic Affiliate of Chartered Association of Building Engineers (CABE).

## \* 報名注意事項 Enrollment Notes \*

報名時間: 星期一至万(9:00 - 20:00)、星期六(9:00 - 13:00) [公眾假期除外]

Operation hours: Monday to Friday (9:00 – 20:00); Saturday (9:00 - 13:00) [Close at Public Holidays]

- 1. 首次報讀本院短期課程者,請先登入**網上報名系統**(網址:<a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a>) 或 掃瞄以下的 QR Code,選擇 <a href="talk">大程學和工程行業</a>> 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、副本及相片 1 張至本院辦理報名。
  - For those who enroll for our courses for the first time, please go to <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the QR Code below, choose the category of <a href="https://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do">Lttps://coes-stud.scs.must.edu.mo/oasc/PersonalInfo.do</a> or scan the part of t
- 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,<u>現金收費上限為澳門幣/港幣</u> 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.

**香詢 Enquiries** Tel: 8796 1807 / 8796 1805 Email: scs@must.edu.mo

Website: <a href="http://www.must.edu.mo/scs-tw/diploma-certificate-programs">http://www.must.edu.mo/scs-tw/diploma-certificate-programs</a>

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 <u>scs@must.edu.mo</u>,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 <a href="mailto:scs@must.edu.mo">scs@must.edu.mo</a>) 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.