



**Introduction:**

Barcelona is renowned for Smart City around the world, where advanced sensors are widely adopted for capturing different types of signals for further analysis. One of the recent advanced technologies, soft robotics technology, has been developed and started being adopted for medical applications in Barcelona in recent years, which enables material bending and deforming without losing the module function. In such way, this technology enables higher flexibility and adaption on acquiring data from human being.

During the training course in Barcelona, delegates will be able to learn the latest technology development, data analysis, clinical applications, verification and validation requirements, data encryption and applications, regulatory requirements and market challenges, etc. for Soft Robotics. Also, delegates of this training course can meet various regulatory and industry stakeholders, to enable further exploration on the business opportunities in Europe and Asia.

**Date:**

1-8 Oct 2017

**Training Fee:**

HK\$36,000 per participant

\*This training course is applying for NTS fund. If this application is approved, successful applicant may get reimbursed up to 50% of the paid training fee.

**Course Highlights:**

- Meeting with Ministry of Health
- Meeting with Local Medical and Healthcare Developers, Manufacturers and Distributors

- Visit University of Barcelona / Institute for Bioengineering Catalonia
- [IoT Solutions World Congress](#) (a worldwide event for IoT applications, including healthcare)

This pamphlet is for reference only. Please contact us for further details and reservation.

Enquiry	Contact Person	Office Number	Email
	Ms Kaman Chan	2788 6028	kamanchan@hkpc.org
	Mr Chester Chan	2788 5455	chesterchan@hkpc.org

**Organizer:**

**Supporting Organization:**



## Aim:

This training course aims at helping HK smart medical and healthcare industries to acquire the most updated knowledge on technology development, data analysis, clinical applications, verification and validation requirements, data encryption and applications, regulatory requirements and market challenges, etc. for Soft Robotics.

## Target Participants:

Target participants include management executives, professionals, technical officers, manufacturers, biomedical engineers, technologists, product development specialists, R & D technicians, scientific officers, etc. from the smart medical and healthcare industries.

## Programme Schedule:

Date	Schedule
1 <sup>st</sup> Oct 2017 (Sun)	Departure from Hong Kong to Barcelona, Spain Arrival at Barcelona, Spain
2 <sup>nd</sup> Oct 2017 (Mon)	<u>Module 1 (6hrs):</u> <ul style="list-style-type: none"> <li>✧ Latest Technology Development of Soft Robotics for Medical Applications and Potential Market</li> <li>✧ Circuit Design and Material Selection on Soft Robotics Technology</li> <li>✧ Constraints of Material Choice and Design</li> <li>✧ 2D and 3D Bio-fabrication and Bio-printing Material Techniques</li> </ul>
3 <sup>rd</sup> Oct 2017 (Tue)	<u>Module 2 (6hrs):</u> <ul style="list-style-type: none"> <li>✧ Design and Fabrication of Bio-hybrid Machine</li> <li>✧ Human Bio-hybrid Machine Interface Customization</li> <li>✧ Development of Novel Battery System for Capturing Human Cell Energy</li> </ul>
4 <sup>th</sup> Oct 2017 (Wed)	<u>Module 3 (6hrs):</u> <ul style="list-style-type: none"> <li>✧ Optimization of Actuation and Material Self Movement</li> <li>✧ Cost effective Method on Manufacturing Soft Robots</li> <li>✧ Challenges to Transfer Soft Robotics from Research Lab to Manufacturing</li> <li>✧ Potential Hazards and Risk Management of Soft Robotics Technology Development</li> </ul>
5 <sup>th</sup> Oct 2017 (Thu)	<u>Module 4 (6hrs):</u> <ul style="list-style-type: none"> <li>✧ Biological Signals Processing and Noise Reduction in Extreme Condition</li> <li>✧ Encrypted Data Transmission for Soft Robotics</li> <li>✧ Signal Amplification Method in Sensing and Command</li> <li>✧ Equipment Calibration and Testing for Signal Accuracy</li> </ul>
6 <sup>th</sup> Oct 2017 (Fri)	<u>Module 5 (6hrs):</u> <ul style="list-style-type: none"> <li>✧ Reliability Testing for Soft Robotics</li> <li>✧ Clinical Trials Requirements of Soft Robotics Applications</li> <li>✧ Validation of Soft Robotics to Current Technology</li> </ul>
7 <sup>th</sup> Oct 2017 (Sat)	Departure from Barcelona, Spain to Hong Kong
8 <sup>th</sup> Oct 2017 (Sun)	Arrival at Hong Kong

### Remarks:

- 1) The above training fee includes round-trip airfare (economy), hotel accommodation on shared twin room basis with breakfast, and other expenses include airport tax, security charges, guide & driver tips and all in-land transportation.
- 2) Lunch, dinner, entertainment, special travel arrangement and visa application are not included.
- 3) Air tickets, transportation, accommodation and other arrangements will be in-charged by a licensed travel agency.

課程編號 Programme Code :	課程名稱 Programme Title :	學費 Programme Fee:
	<b>Overseas Training to Barcelona on Novel Soft Robotics Technology from Design, Fabrication to Validation for Smart Healthcare</b>	<b>HK\$36,000</b>

**甲部 (Part A) 申請者資料 Applicant Information :**

中文姓名 (先生/小姐/太太/女士\*) : \_\_\_\_\_  
Chinese Name (Mr./Miss/Mrs./Ms\*) : (必須與香港身份證/護照相同 Must be the same as shown on ID card/Passport)

英文姓名 : \_\_\_\_\_  
Name in English : 姓 Last Name 名 First Name (必須與香港身份證/護照相同 Must be the same as shown on ID card/Passport)

公司名稱 : \_\_\_\_\_  
Company Name :

職位 : \_\_\_\_\_  
Position :

辦事處電話 : \_\_\_\_\_ 手提電話 : \_\_\_\_\_  
Office Telephone : Mobile Number :

最高教育程度 Highest Achieved Education Level (請選擇一項 Please select one only):  
 小學 Primary  中學 Secondary  文憑至副學位 Diploma to Associate Degree  
 學位 Degree  研究院或以上 Postgraduate

傳真號碼 : \_\_\_\_\_  
Fax Number:

電郵地址 : \_\_\_\_\_  
E-mail Address :

通訊地址 : \_\_\_\_\_  
Correspondence Address : 室 Room/Flat 樓 Floor 座·大廈 Block, Building  
屋苑·街道 Estate, Street/Road 地區 District

**乙部(Part B) 繳費方法 Method of Payment :**

請選擇一項 Please select one only \*請刪去不適用者/Please delete whichever is inappropriate

課程費用由僱主贊助? Is the programme fee sponsored by your employer?  是 YES  否 NO

現金 Cash / 易辦事 EPS / 信用卡 Credit Card\*\* (Visa/MasterCard)\* 請親臨本局辦理 Must be made in person at enrolment counter

支票號碼 Cheque No. : \_\_\_\_\_, (公司 Company / 私人 Private\*)。  
(支票請劃線, 抬頭人為「香港生產力促進局」。The cheque has to be crossed and made payable to the "Hong Kong Productivity Council.")

**\*\*可授權本局轉賬, 請向職員查詢 You may authorize HKPC to handle money transfer. For details, please contact our staff**

**聲明 Declaration :**

本人聲明在此報名表格及隨附文件所載的資料, 依本人所知均屬完整、真實及準確。本人已細閱並接受報名表內的所有條款及細則。  
I declare that all information provided in this enrolment form and the accompanying documents are, to the best of my knowledge, true, accurate and complete. I have read and accepted all the terms and conditions of this enrolment form.

本人反對香港生產力促進局使用本人的個人資料, 包括但不限於姓名、年齡、性別、電話號碼、傳真號碼、職位、會員身份、繳費資料包括信用卡資料 (如適用)、學術及專業資格、通訊地址及電郵地址 ("個人資料") 於推介本局最新發展、工業支援服務、顧問服務、培訓課程及相關的活動及其他由生產力局的推廣活動的用途。I object to the proposed use of my personal data including, without limitation, name, age, gender, phone number, fax number, job title, member status, payment details including credit card information (where applicable), academic and professional qualification, correspondence address and email address ("Personal Data") for the purpose of sending me information relating to HKPC's latest developments, industry support services, consultancy services, training courses and related events, and other marketing activities as may be organized by HKPC.

申請者簽名 Applicant's Signature : \_\_\_\_\_

日期 Date : \_\_\_\_\_

**丙部(Part C) 問卷調查 Survey**

請問閣下如何得悉本院的課程資料? (可選多於一項) Where did you get the information about this programme? (May choose more than one option)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> 香港生產力大樓 HKPC Building   | <input type="checkbox"/> 報紙 Newspaper   | <input type="checkbox"/> 推廣電郵 Promotion e-mail  |
| <input type="checkbox"/> 香港生產力促進局網頁 HKPC website | <input type="checkbox"/> 蘋果日報 Apple Daily   | <input type="checkbox"/> 公司推介 Company Referrals |
| <input type="checkbox"/> 互聯網 Internet            | <input type="checkbox"/> 東方日報 Oriental Daily  | <input type="checkbox"/> 傳真 Fax                 |
| <input type="checkbox"/> 生產力專訊 HKPC News Flash   | <input type="checkbox"/> 經濟日報 HK Economy Times  | <input type="checkbox"/> 親友推介 Referrals         |
| <input type="checkbox"/> 雜誌 Magazine             | <input type="checkbox"/> 星島日報 Sing Tao Daily  | <input type="checkbox"/> Others 其他: _____       |
| <input type="checkbox"/> e-zone                  | <input type="checkbox"/> 明報 Ming Pao  |   |
| <input type="checkbox"/> 電腦廣場 PC Market          | <input type="checkbox"/> 都市日報 Metro Hong Kong   |   |
| <input type="checkbox"/> Recruit                 | <input type="checkbox"/> 頭條日報 Headline  |   |
| <input type="checkbox"/> 招職 Jiu Jik              | <input type="checkbox"/> AM730  |   |
| <input type="checkbox"/> Others 其他: _____        | <input type="checkbox"/> 專業學會刊物 Journals/Publications of Professional Institutes: _____ |   |

請選擇閣下最希望接收本局哪個範疇的資訊 (可選多於一項) Please indicate which area(s) of information you would like to get from HKPC the most

- |  |   |
|--|---|
| <input type="checkbox"/> 先進製造科技 Advanced Manufacturing Technology          | <input type="checkbox"/> 生產力局最新資訊 Latest News of HKPC               |
| <input type="checkbox"/> 自動化服務 Automation Services                         | <input type="checkbox"/> 製造流程管理 Manufacturing Process Management    |
| <input type="checkbox"/> 品牌管理 Brand Management                             | <input type="checkbox"/> 產品設計與開發 Product Design and Development     |
| <input type="checkbox"/> 企業流程管理 Business Process Management                | <input type="checkbox"/> 講座及活動 Seminar and Activities               |
| <input type="checkbox"/> 顧客服務提升 Customer Service Enhancement               | <input type="checkbox"/> 軟件測試 Software Testing                      |
| <input type="checkbox"/> 環境管理 Environmental Management                     | <input type="checkbox"/> 檢測及認證服務 Testing and Certification Services |
| <input type="checkbox"/> 資訊及通訊科技 Information and Communications Technology | <input type="checkbox"/> 培訓及人力資源發展 Training and HR Development      |
| <input type="checkbox"/> 知識產權及專利 IP and Patent                             |   |

**受僱公司規模及業務性質 Size and Nature of Organization :**

**公司僱員總人數 Total number of employees**

- Under 50 ( 50以下)       50 - 99       100 – 199       200 – 499       500 and over ( 500及以上)

**公司主要業務性質 (可選多於一項) Primary Industry Type of your Company (May choose more than one option)**

- |   |  |
|---|--|
| <input type="checkbox"/> 行政及支援服務 (例如: 廣告、展覽、公共關係、物業管理等)<br>Administrative and Support Services (e.g. Advertising, Exhibitions, Public Relations, Property Management, etc.) | <input type="checkbox"/> 資訊科技及電訊 Information Technology and Telecommunications                                   |
| <input type="checkbox"/> 汽車零部件 Automotive Component   | <input type="checkbox"/> 機械、五金及模具 Machinery, Metals and Tooling  |
| <input type="checkbox"/> 航空 Aviation  | <input type="checkbox"/> 化學原料、原材料製造 Manufacture of Chemicals and Raw Materials                                   |
| <input type="checkbox"/> 建造 Construction  | <input type="checkbox"/> 媒體、印刷及出版 Media, Printing and Publishing   |
| <input type="checkbox"/> 創意產業 Creative Industry   | <input type="checkbox"/> 醫療及保健器材 Medical Device and Healthcare   |
| <input type="checkbox"/> 教育及培訓 Education and Training   | <input type="checkbox"/> 光學產品 Optical Products   |
| <input type="checkbox"/> 電器 Electrical Appliances   | <input type="checkbox"/> 塑膠 Plastics   |
| <input type="checkbox"/> 電子 Electronics   | <input type="checkbox"/> 專業服務 (例如: 會計、建築、法律等) Professional Services (e.g. Accounting, architecture, legal, etc.) |
| <input type="checkbox"/> 環保服務 Environmental Services  | <input type="checkbox"/> 零售 Retail   |
| <input type="checkbox"/> 政府/非牟利組織/商會 Government/NGOs/Trade Associations   | <input type="checkbox"/> 紡織及服裝 Textile and Apparel   |
| <input type="checkbox"/> 餐飲及款待 Hospitality, Food and Beverage   | <input type="checkbox"/> 玩具 Toys   |
| <input type="checkbox"/> 進出口貿易 Import and Export Trade  | <input type="checkbox"/> 運輸及物流 Transportation and Logistics  |
|   | <input type="checkbox"/> 鐘錶珠寶 Watch, Clock and Jewelry   |

**報名程序**

**ENROLMENT PROCEDURE**

請於 **2017年9月1日或之前** 填妥報名表、連同相關課程需要的文件及費用，親身或以郵遞方式遞交。

1. 郵寄地址: 九龍達之路 78 號生產力大樓香港生產力促進局 4 樓汽車及電子部 (陳嘉雯小姐收) (請於信封面註明報讀課程名稱及編號。)

**條款及細則:**

- 學費必須連同報名表 (可用影印本) 於開課前一併繳交，否則報名無效。
- 所收集的個人資料將會作入學申請、登記、學術、行政、研究、統計及市場分析及用於推介本局最新發展、工業支援服務、顧問服務、活動和培訓課程的用途。個人資料會嚴格保密處理。除非獲得閣下的同意，本局不會將個人資料轉移予第三者。本局已制定收集、使用及保留個人資料的政策，於報名處供索閱，閣下亦可向本局個人資料管理主任查詢。
- 閣下可以信用卡、易辦事或支票繳交學費。學費收據以本局機印方為有效，收據上會列明已繳交的金額。如申請人以支票繳費，所繳交款項須經過銀行結算後方可作實。
- 除非本局於以下限期前收到申請者書面通知退學，否則已繳學費 (不論全費或部份) 概不退還：
  - 由本地講師教授的課程，最少於開課前五個工作天通知
  - 由外地講師教授的課程，最少於開課前十五個工作天通知
 閣下申請退還學費需繳交手續費二百元正。如申請者以信用卡繳交學費，則需額外支付學費約 4% 作銀行手續費用。
- 閣下可提名他人代替其本人出席課程，惟事先須得本局同意。閣下不可轉換其他課程。
- 生產力局保留在任何情況下及以任何原因拒絕任何入學申請的權利。閣下繳付學費後，仍須符合入學的所有條件，其申請方可獲得接納。
- 生產力局保留在有需要的情况下更改講師及/或課程內容、授課地點、日期及/或時間的權利。
- 颱風及黑雨警告：如課堂時間是在早上(09:00-13:00)、下午(14:00-17:00)或晚間(18:30-22:00)，將在下列情況下取消：(一)八號或以上颱風訊號或黑色暴雨警告訊號在早上 6:00、11:00 或下午 4:00 仍然懸掛；或(二)香港天文台在早上 6:00、11:00 或下午 4:00 或之後，宣佈將懸掛八號或以上颱風訊號或黑色暴雨警告訊號。本局將盡早通知閣下補課的日期及時間。
- 本局保留更改以上“條款及細則”的權利。以上“條款及細則”內容均以本院課程單張及網頁公佈之最後更新版本為依歸。

Please complete and send this enrolment form with requisite documents and fee to the Institute in person or by mail **on or before 1 September 2017**.

Mailing Address: Automotive and Electronics Division, 4/F, Hong Kong Productivity Council, HKPC Building, 78 Tat Chee Avenue, Kowloon. (Attend to Ms. Kaman CHAN) (Please mark the programme title and programme code on the envelope.)

**Terms and Conditions:**

- Programme fee must be submitted together with this form (or photocopy of this form) before programme commencement, otherwise enrolment will be rejected.
- Personal Data collected will be used for processing your application for admission, registration, academic, administrative, research and statistical purposes and will also be used for marketing purposes, specifically for the purpose of sending you information relating to HKPC's latest developments, industry support services, consultancy services, events and training programmes. Personal Data will be treated in strict confidence. Unless otherwise agreed by you, HKPC will not transfer Personal Data to any third parties. HKPC implements a policy governing the collection, use and retention of Personal Data, which is made available at the enrolment counter. You may also contact Personal Data Controlling Officer of HKPC for further details.
- You may make payment by credit cards, EPS or cheques. Amount received will be imprinted on the official receipt. Only receipt printed with receipt printers at HKPC is valid. Receipt of cheque payment is subject to bank clearance.
- Enrolment fee (in full or in part) is **not refundable** except if HKPC is notified in writing of your withdrawal:
  - at least 5 working days** before the programme commencement for training program run by **local speaker**
  - at least 15 working days** before the programme commencement for training program run by **overseas speaker**
 A handling charge of **HK\$200** will be levied. For payment made by credit card, an additional **bank charge of around 4%** of the enrolment fee will be imposed.
- You may, subject to the prior approval of HKPC, nominate a person to attend the programme on your behalf. Programme switching request will not be accepted.
- HKPC reserves the right to reject any application in any circumstances and for whatever reasons. Payment of fees should only be construed as conditional acceptance of application. To be accepted for any application, you are required to fulfill the admission requirements.
- HKPC reserves the right to replace the speaker and/ or change the contents, venue and/or time as may be necessary.
- Classes in the morning (09:00-13:00), afternoon (14:00-17:00) or evening (18:30-22:00) will be cancelled if:
  - Tropical Cyclone Signal No.8 or above OR Black Rainstorm Warning remains hoisted after 6:00 a.m., 11:00 a.m. and 4:00 p.m. respectively; **OR**
  - Tropical Cyclone Signal No.8 or above OR Black Rainstorm Warning is announced by the Hong Kong Observatory to be hoisted at/after 6:00 a.m., 11:00 a.m. and 4:00 p.m. respectively.
 You will be notified of the re-scheduling arrangement as soon as possible.
- These terms and conditions are subject to revisions as may be set out in the programme pamphlets and the latest updates in the Institute's website.

### General Terms and Conditions

Each study mission ("Mission") is subject to the following terms and conditions:

1. Acceptance

HKPC may in its absolute discretion accept or reject the Application without providing any reasons therefor.

2. Payment

- a) Upon submission of Application, the Applicant shall pay to HKPC the Participation Fee.
- b) If the Application is rejected, HKPC will refund to the Applicant without interest.
- c) When the Application is accepted by HKPC, the Applicant will become a Participant. If the Participant subsequently wishes to withdraw participation, he/she may do so by notice in writing to HKPC prior to the departure date of the Mission according to the number of days prescribed in the pamphlet for the Mission whereupon the Participation Fee may be refunded subject to the deduction of any costs already paid by HKPC which are otherwise unrecoverable through HKPC's service providers. An administration fee as prescribed in the pamphlet for the Mission will be charged to the Participant.
- d) The Participant shall settle the hotel directly all additional charges incurred by them at the hotel when they check out from the hotel.
- e) No interest will be payable by HKPC in respect of any refund amounts to the Participant.

3. Termination Policy

- a) Without prejudice to HKPC's other rights and remedies, HKPC has the right to terminate the Participant's right to participate in the Mission on the occurrence that the Participant violates any of the terms or requirements contained in these Conditions.
- b) The Participant's right to participate in the Mission shall automatically terminate in the event that all or most of the Participants are refused entry visa or entry permit to the country or place where the Mission shall be held by any competent authorities.
- c) In the event that the Participant's right to participate in the Mission is terminated, the Participation Fee will not be refunded to the Participant and any expenses incurred by HKPC for an on behalf of the Participant prior to such termination and all other expenses reasonably incurred by HKPC as a consequence of such termination shall be paid on demand by the Participant to HKPC.
- d) HKPC reserves the right to terminate the Participant's right to participate or continue to participate in any future Mission if the Participant is found to have committed any act including but not limited to failing to respect the intellectual property rights of any other party, non-compliance with product safety, environmental laws and/ or any other act which, in the sole opinion of HKPC, might damage the reputation and/ or image of Hong Kong, the industries, the Mission, HKPC, or the Participant has done or failed to do any act which HKPC, in its absolute discretion decides that such right shall be terminated.

4. Cancellation and/ or Changes

- a) HKPC reserves the right in any circumstances to cancel the Mission, for example because of an insufficient number of Participants or for whatever reason. If HKPC cancels the Mission, then save for an event set out in clause 4(e) below, HKPC's liability shall be limited to the amount of the fee actually paid by the Participant for that Mission.
- b) The dates and itinerary of the Mission may be subject to change without prior notice. HKPC reserves the right to use alternative accommodation, tours and transport to those stated in the Mission's promotional leaflets.
- c) Fees may be subject to changes, including without limitation surcharges, airfare, fuel or tax increases and currency fluctuations. HKPC reserves the right to charge Participants for all additional costs arising from such changes.
- d) Fees paid are not refundable on any unused part of the Mission or in the event that a Participant cancels participation in the Mission for any reason. Prior to the commencement of a Mission, HKPC may at its sole discretion accept a substitute nominated by the Participant to attend the Mission on his or her behalf, or accept request for change in departure/ return dates or transport arrangements, subject to the payment of any additional fees and charges that may be incurred by HKPC in agreeing to such a substitute or change.
- e) HKPC shall not be liable to any Participant for any delay, non-performance of services, loss or damage arising from any cause or causes beyond its reasonable control including, without limitation, any of the following: act of God, governmental act, war, terrorist attacks, fire, flood, earthquake, storm, tsunami, embargo, explosion or civil commotion. In such an event, HKPC reserves the right, at its sole discretion, to:
  - (i) postpone the Mission and/ or alter the dates and itinerary of the Mission as necessary without any refund due to the Participant; or
  - (ii) cancel the Mission and offer Participants a refund subject to the deduction of any costs already paid by HKPC which are otherwise unrecoverable through HKPC's service providers.

5. Exclusion of Liability

- a) HKPC shall not be liable for any loss, damage or personal injury howsoever suffered by or caused to the Participant or his/her officers, representatives, agents, employees or any third party, or other property in the course or in relation to the Mission, unless such loss, damage or personal injury shall be caused by any breach by HKPC.
- b) HKPC assumes no responsibilities for any introduction or transaction made between the Participant and any third party during or as a result of the Mission.
- c) The Participant shall be responsible for his/her own visa arrangements. In the event that a Participant is refused entry into any country on a Mission, HKPC shall not be liable for any loss of damage suffered.
- d) The Participant shall be responsible for effectuating all insurance coverage necessary in connection with his/her participation in the Mission including but not limited to insurance in respect of his/her other property and himself/herself (including travel and medical insurance).
- e) The Participant undertakes to indemnify and at all times hereafter to keep indemnified HKPC from an against all liabilities, actions, proceedings, claims, damages, costs and expenses whatsoever which he/she may suffer or incur by reason of or in relation to any act, omission or default by the Participant or his/her officers, representatives, agents and employees in the course of or in relation to the Mission.

6. General

- a) The Application Form and the Conditions embody and set out the entire agreement and understanding of the parties and supersede all prior oral or written agreements, understandings or arrangements between HKPC and the Applicant relating to the Mission.
- b) HKPC reserves the right to alter and amend any of these Conditions and to issue additional rules and regulations (including but not limited to the Participant's manual) at any time it considers necessary for the orderly operation of the Mission. The amended Conditions and the additional rules and regulations shall be sent to the Participant and become effective immediately. The Participant will be deemed to have notice of the same and have accepted the amended Conditions and the additional rules and regulations. The Participant acknowledges that HKPC shall have the right to interpret these Conditions, additional rules and regulations together any amendments thereof. All interpretations of these Conditions, any additional rules and regulations, and any amendments thereof by HKPC shall be final and binding on the Participants.
- c) These Conditions shall be governed by the laws of The Hong Kong Special Administrative Region only.