Six Sigma Black Belt Certification Programme

~ **A free gift** - a full license of the famous statistical software SigmaXL ~

免費贈送——著名統計軟件 **SigmaXL** 的完整許可證

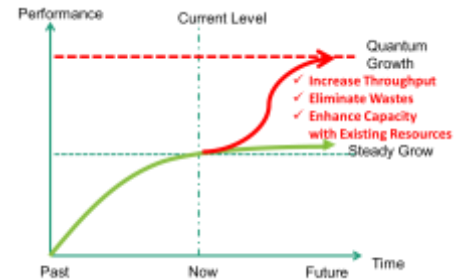## Indispensable techniques for business and career grow

業務和職業發展不可缺少的技術

Six Sigma Institute (SSI)

As a non-profit professional organization, the main goal of the Six Sigma Institute (SSI) is to accredit Six Sigma professionals with recognized knowledge and skills in this applied science. SSI works closely with universities and professional bodies to promote the theory and application of Six Sigma, Lean and Theory of Constraints and associated methodologies. SSI develops and launch latest and innovative training programmes aimed at enhancing the competitiveness of practitioners and their organizations.

Six Sigma Programme

Six Sigma methodology since developed by Motorola in 1986 has continuously evolved from quality improvement in 80's and cost reduction in 90's to now focus on revenue generation. To make this application science to match with rapid change of business requirements, Six Sigma has integrated the essence of Lean and Theory of constraints.

This integrated approach can help organizations achieve a leap in business growth. The Six Sigma Black Belt is an effective driving force for the company to achieve this goal

Course Overview

This unique course will provide you with a **full license for the famous statistical software Sigma XL**. This indispensable tool not only allows you to perform data analysis on future Six Sigma projects, but also helps you make management decisions based on facts and data.

Who should attend?

1. Quality, R&D, process engineers or supervisors.
2. Graduates of Six Sigma Green Belt programme
3. Executives responsible for business growth.
4. Managers who wants to enhance their analytical skills

Why SSI programme?

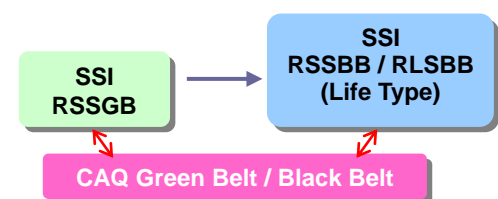|	
Award-Wining Institute	As a renowned professional organization, SSI has accumulated 18 years of training experience, providing and sharing knowledge and experience for more than 5,000 participants
Result-Orientated	Aims to develop participants' talents by sharing our rich consultancy experience with latest solutions for business growth.
Flexible Schedule	Provide weekday and weekend courses to let students budget their time between work and family life.
Professional Network	Automatically become a member of our Six Sigma community-a powerful platform for professional networking and experience sharing.
Your partner for Growth	Provides the most comprehensive theory and application of Six Sigma, Lean and Theory of Constraints

Six Sigma Green Belt → Six Sigma Black Belt → Master Black Belt

Six Sigma Programme Study Path

Recognition	Certificate holders who have completed a Six Sigma project with verified savings of HK$500,000 or an individual project in the SSI Six Sigma Project Simulation course are eligible to register with SSI as a Lean Sigma Black Belt and use the professional title RLSBB follows their name.
	The SSI Black Belt certification has been mutually recognized by the China Association for Quality (CAQ). RLSSBB (Life Type) also meets the requirements of the China Association for Quality (CAQ) Black Belt certification, is eligible to apply for the CAQ's Certified Six Sigma Black Belt Certificate.

SSI RSSGB → SSI RSSBB / RLSBB (Life Type)

CAQ Green Belt / Black Belt

Six Sigma Registration Path

Lean Six Sigma Black Belt Course Outline

Introduction and Project Definition

0.0 Course Introduction
1.1 The latest Development of Lean, Six Sigma and Theory of Constraints (TOCLSS)
1.2 A Case Example of Six Sigma Projects
1.3 Contribution of TOCLSS towards Industry 4.0
1.4 Identification of Six Sigma Projects
1.5 Project Charter
1.6 project schedule
1.7 High Level process Map – SIPOC
1.8 VOC, CCR and CTQ
1.9 In-class Project – Define phase

Analysis – Process Analysis

3.1 Overview of Analyze Phase
3.2 Process Analysis
3.3 Lean and Lean Transformation
3.4 Evaluate the current situation – VSM
3.5 Case Study- Manufacture
3.6 Case Study- Service
3.7 Identify Improvement Opportunities
3.8 Law of Variations
3.9 Theory of Constraints
3.10 Wastes Elimination
3.11 Modify the Existing Process -VSM
3.12 Case Study – Manufacture
3.13 Case Study - Service
3.14 Substantiate and enumerate improvements
3.15 Implement New Standard Work

Process Improvement

4.1 Overview of Improve Phase
4.2 Introduction to Design of Experiment
4.3 DOE – One Factor at a Time
4.4 DOE – Full Factorial Design
4.5 DOE Case study
4.6 DOE Exercise
4.7 Sample Size, Centerpoint and Blocking
4.8 In-class Project – Factorial Design
4.9 Response Surface Method
4.10 RSM Case Study
4.11 In-class Project RSM Design
4.10 Lack of Fit Issues
4.11 Case Study
4.12 Fractional Factorial Design
4.13 Case Studies
4.14 In-class Project - Improve Phase

Process Measurement

2.0 Measure Phase Overview
2.1 Detail Process Map
2.2 In/Out Put Analysis
2.3 C&E Matrix
2.4 FMEA
2.5 Data Collection Plan
2.6 Measurement Systems Analysis
2.7 Attribute GR&R
2.8 Introduction to SigmaXL
2.9 Basic Statistics
2.10 Current Process Capability
2.11 PPM, DPMO and Sigma Level
2.12 In-class Project - Measure phase

Analyze - Data Analysis

3.16 Graphical Data Analysis
3.17 Root Cause Analysis
3.18 Why-Because Tree
3.19 Validate Root Causes by Data
3.20 Graphical Tools
3.21 Confirming Causal and Effects
3.22 Regression Analysis
3.23 Chi Square Tests
3.24 Exercises
3.25 Hypothesis Testing of Means
3.26 Testing Of Variation
3.27 Testing Of Proportion
3.28 Normality and Non-normal Data Transformation
3.29 Determine Sample Size for Tests
3.30 Two-way ANOVA
3.31 Nonparametric Tests
3.32 In-class Project – Analyze Phase

Process Control

5.1 Oversew of Control Phase
5.2 Risk Identification and Management
5.3 Control Plan
5.4 SPC – Continuous Control Chart
5.5 SPC - Attribute Control Charts
5.6 Cusum Chart
5.7 In-class Project Control Phase
5.8 Performance comparison
5.9 Project Review
5.10 Close the project and handover
5.11 Prospects of BB in HK, UK, Canada, Singapore, New Zealand and China
5.12 Opportunities for Further Growth

Case Example Book – 5 BB Projects
Presentation of In-class BB Project
Mock Exam

Professional Certificate

A Professional Certificate in Six Sigma Black Belt will be awarded to participants who met all requirements of the course (70% attendance, complete all assignments, a group project and pass the examination).

Course Schedule (Please visit our website/backward pages for details of schedules)

*A Black Belt course could be enrolled with a Green Belt course as a Combined Course and the examination of Green Belt will be exempted.

Course Fee   **Please contact us about course fee and DISCOUNT details.**

The course has been included in the list of reimbursable courses for Continuing Education Fund (CEF) purposes. Please visit the CEF website: https://www.wfsfaa.gov.hk/cef/ or call (852) 3142 2277 for enquiry. [Institution Code: 616 / Course Code: 21C03931-4]

Enquiry   Tel: (852) 2581 2771 Email: info@ssi.org.hk   Website: www.ssi.org.hk

Application Form 申請表格

Course code 課程編號 (Please refer to the course pamphlet 請參照課程單張填寫):_____

Personal Information 個人資料

Chinese Name 中文姓名 (先生/小姐/太太/女士): _____

English Name 英文姓名 (Mr./Miss/Mrs./Ms.): [Surname 姓氏] _____ [First Name 名字]_____

HKID Card/Passport No. 香港身份證/護照號碼: _____ Issuing Country (if any) 簽發國家(如有): _____

Company Name 公司名稱: _____

Business Nature of the Company 公司業務性質: _____ Department 部門: _____

Position 職位: _____Job Nature 工作性質: _____

Mobile No. 手提電話: _____ Office Tel. 辦事處電話: _____ Home Tel. 住宅電話: _____ E-

mail Address 電子郵箱: _____ Fax 傳真: _____

Correspondence Address 通訊地址:_____

Company Address 公司地址:_____

Age 年齡: ☐ 18-25　☐ 26-35　☐ 36-45　☐ 45-55　　☐ 55+

Highest Achieved Education Level 最高教育程度:

☐ Secondary 中學　☐ Post-Secondary 專上 ☐ University 大學 ☐ Postgraduate or above 研究院或以上 ☐ Others 其他_____

How do you know about SSI course information? 您如何得悉本學會課程資料?

☐ Facebook ☐ Yahoo 雅虎 ☐ Google 谷歌 ☐ JobsDB ☐ E-mail 電子郵件 ☐ Friend Recommendation 朋友介紹

☐ Seminar 講座 ☐ Others 其他_____

☐ I object to the proposed use of my personal data including, without limitation, name, age, gender, phone number, fax number, job title, academic and professional qualification, correspondence address and email address ("Personal Data") for the purpose of sending me information relating to SSI's latest developments, job matching support services, training courses and related events, and other marketing activities as may be organized by SSI. 本人反對六式碼學會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、學術及專業資格、通訊地址及電郵地址 ("個人資料")於推介本會最新發展、就業支援服務、培訓課程及相關的活動及其他由本會的推廣活動的用途。

Course Fee Payment(for specific programmes) 繳付學費 **(特定課程)**

For those who would like to get 10% off early bird rate, course fees should be settled 4 weeks before the course commencement date. 如欲享用 9 折提早報名優惠，所有費用須於開課前 4 個星期繳付。

General students (for those who do not claim CEF) are required to settle course fees 2 weeks before the course commencement date. 一般學員(不需申請持續進修基金者) 必須於開課前 2 個星期繳付所有費用。

15% off discount for group enrollment of 3 or above from the same company. 3 位或以上來自同一所機構之團體報名可享有 85 折優惠。

For those who claim CEF, course fees should be settled according to the payment details in confirmation email 申請持續進修基金的學員，需根據確認電郵內的付款詳情支付費用。

For those who need to claim CEF, please tick the following box: 需要申請持續進修基金的學員，請剔選以下空格:

Have you opened a valid CEF account before? 閣下是否已開立有效之持續進修基金戶口?

☐ Yes 是　　☐ No 否

Fail to settle payment before deadline results in cancellation of application or suspension from taking subsequent courses. 未能如期付款的申請將不獲保留或導致申請者被取消上課資格。

Declaration 聲明

1. I declare that all information provided in this application and the attached documents are, to the best of my knowledge, accurate and complete. 本人聲明在此申請表格及隨附文件所載的資料，依本人所知均屬完整真確。

2. I consent that if admitted, I will comply with all the Rules and Regulations stipulated by the Six Sigma Institute 本人同意如所報讀課程獲取錄，本人定當遵守六式碼學會所定的規則及章程。

3. I have read the IMPORTANT NOTE in this application form and understood that the details of enrolment are subject to revisions in the course pamphlets and the latest changes in SSI website. 本人已細閱申請表格內的重要通知，並明白所有報名詳情均以本會課程單張及網頁的最新修訂為依歸。

4. I understand that Personal Data collected will be used for processing 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 SSI's latest developments, job matching support services, events and training courses. Personal Data will be treated in strict confidence. Unless otherwise agreed by me, Personal Data will not be transferred to any third parties. 本人明白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會最新發展、就業支援服務、活動和培訓課程的用途。個人資料會嚴格保密處理。除非獲得本人的同意，個人資料不會轉移予第三者。

　Signature 簽名: _____　　Date 日期: _____

Six Sigma Institute Limited, Unit 1627, 16/F, Star House, No.3 Salisbury Road, Tsim Sha Tsui, Kowloon.　　Tel (852) 2581 2771　　Fax (852) 2581 2776　　Website: www.ssi.org.hk

If you do not want to receive any promotional materials from us, please call at (852) 25812771 or email to info@ssi.org.hk to inform us.

Method of payment 繳費方法

☐ **ATM 自動櫃員機** (Please use Bill Payment service at HSBC / Hang Seng Bank ATMs to settle the bill and keep the original of the ATM advice for record. 請使用滙豐或恒生銀行自動櫃員機的繳賬服務繳費，並保存自動櫃員機通知書正本以作紀錄。HSBC Account Name and No.: Six Sigma Institute Limited 004-126-848001-001. 滙豐銀行帳戶名稱及帳號: 六式碼學會有限公司 004-126-848001-001。)

☐ **E-Banking 網上銀行** (For e-banking registered user of HSBC / Hang Seng Bank, you may make payment in HKD currency at the bank website without additional charges. 如閣下已登記滙豐或恒生銀行的網上理財服務，可透過銀行網站以港元繳費而不會被收取額外服務費。)

☐ **Credit Card Online Payment 信用咭網上繳費** (Please settle the payment by using merchant code '9983' and fill in Your 8-digit contact phone no. in the blank of "Bill Account No.". 請以商戶編號「9983」繳費並於帳單號碼欄填寫閣下 8 位數字的電話號碼。)

☐ **PPS By Internet 網上繳費靈** (Login your PPS account through website: www.ppshk.com and enter '9983' at 'Search by Merchant Code' in 'Add Bill' page and settle the payment by following the instructions. Please keep the payment details for record. 請於繳費靈網頁 www.ppshk.com 登入，在「登記賬單」頁的「以商戶編號搜尋」一欄輸入「9983」，然後按指示完成付款程序。請保存繳費資料以作紀錄。)

☐ **FPS 轉數快** ID:169714052 Payee: Six Sigma Institute Limited，請保存付款編號以作紀錄。)

☐ **Cheque No. 支票號碼:** _____ (Please send a crossed cheque which is made payable to 'Six Sigma Institute Limited' to Unit1627, 16/F, Star House, No.3 Salisbury Road, Tsim Sha Tsui Kowloon, Hong Kong. Please write the applicant's name and course code on the back of the cheque. Post-dated cheque will not be accepted. 請把抬頭人為「六式碼學會有限公司」的劃線支票寄往香港九龍尖沙咀梳士巴利道 3 號星光行 16 樓 1627 室，恕不接受期票，請於支票背面註明申請人姓名及課程編號。)

Enrolment Procedures 報名程序

Please send or fax the completed application form at fax no. (852) 2581 2776 or e-mail to info@ssi.org.hk. Students should submit full payment and/or documentation for settlement before the applicable payment deadline. For enquiries, please call us at (852) 2581 2771. 請將填妥的申請表電郵至 info@ssi.org.hk 或傳真至(852) 2581 2776，課程的所有費用及/或所需文件必須於相應的期限前提交，如有查詢，可致電(852) 2581 2771 聯絡我們。

Registration Service 註冊服務

The SSI provides registration service for those who have successfully completed relevant training programs. For more details, please refer to related program pamphlets or contact us. 本會為成功完成相關培訓課程的學員提供專業資格註冊服務，請參閱相關課程單張或向我們查詢詳情。

IMPORTANT NOTE 重要通知

1. Receipt of this application form by SSI constitutes an official booking. SSI 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. 本會收到已填妥的申請表後會為申請人保留學位。本會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。申請者繳付學費後，仍須符合所有入學條件，其申請方可獲得接納。

2. Refund Policy for course fees paid 已繳費用的退還情況:
   > Notice of more than 1-week prior course starts - Refund 80% 於開課前 1 個星期或以上通知退學 – 可退還 80%
   > Notice of less than 1 week before course starts - Refund 70% 少於開課前 1 個星期通知退學 – 可退還 70%
   > Once course has begun - NO REFUND 開課後通知退學 – 不獲退還

3. All SSI students enjoy the special privileges of buddies of Six Sigma Community. 所有本會學員可享有與六式碼社區之友同等優待。

4. The course fees for specific programmes include two examination opportunities, fees will be charged for joining extra examinations. Please contact us for the details. 本會特定課程之費用已包括兩次考試機會，額外考試機會需另行收費。請向本會查詢有關詳情。

5. Six Sigma Institute reserves the right to revise the subject without prior notice. Please see our website for the latest changes. 本會保留在無需事前通知的情況下對課程作出任何變動的權利。請留意本會網頁的最新情況。

6. If No. 8 Typhoon / Black Rainstorm warning signal is lowered 當八號颱風或黑雨警告在以下時段除下:

at or before 07:00 早上七時前	all morning sessions will be conducted as scheduled. 所有早上課堂會如常進行。
between 07:00 and 11:00 早上七時至十一時期間	all morning sessions will be cancelled, but all afternoon sessions will be conducted as scheduled. 所有早上課堂將會取消，但所有下午課堂會如常進行。
between 11:00 and 16:00 早上十一時至下午四時期間	all afternoon sessions will be cancelled, but all evening sessions will be conducted as scheduled. 所有下午課堂將會取消，但所有夜間課堂會如常進行。
after 16:00 下午四時後	all evening sessions commencing from 18:00 onwards will be cancelled automatically. 所有下午六時後進行的夜間課堂將會取消。

   Participants will be notified when the class will be made up as soon as possible. 本會將盡早通知學員補課的日期及時間。

7. Personal Data Collection Statement 個人資料收集聲明
   The personal data provided on this application form is used by SSI for purposes related to the processing of enrolment and course administration. Under the provisions of the Personal Data (Privacy) Ordinance, applicants have rights to request access to and make correction of their personal data. 申請人於此表格提供的個人資料，本會只會用作處理報名及課程行政的有關事宜。根據個人資料(私隱)條例，申請人有權查詢及更改其個人資料。