

Six Sigma Master Black Belt Certification Programme

**Registered Six Sigma
Master Black Belt, RSSMBB
Course Code: MBB-2020**



Six Sigma Master Black Belt certification Programme

1. Introduction

Six Sigma, Lean and TOC (Theory of Constraints) are well organized over the world as effective methodologies for rapid financial results. The Six Sigma Institute (SSI)'s Master Black Belt course covers a comprehensive knowledge of these methodologies and aims to develop Master Black Belts (MBBs) who are competent to employ these tools and able to elevate organizational performance rapidly.

A qualified MBB who is usually in a senior position of an organization, should have knowledge and skills to provide advices to the senior management in achieving dramatic performance improvement solutions, the MBB is also a Six Sigma leader in the organization and act as trainer and coach to Black Belts and Green Belts within the organization.

MBB are potential business partners of the SSI and they will be invited to conduct training programmes and participate the SSI's consultancy projects.

2. Upon completion of the programme, participants should have acquired:

- 2.1 Diagnostic skills to identify certain of critical areas of complex organization systems that limit the outputs of the company.
- 2.2 Ability to use SSI's TOCLSS (pronounce as TOP-CLASS) approach for providing holistic improving strategies for rapid business results.
- 2.3 Advanced Lean and Six Sigma tools and capabilities for tracking complex Lean and Six Sigma problems.
- 2.4 Effective training skills for conducting in-house Green Belt and Black Belt courses.
- 2.5 Dramatic Project coaching and management skills to ensure successful project completion.
- 2.6 Leadership skills for organization-wide Lean Six Sigma deployment and management skills for success implementation and sustain the scheme.
- 2.7 Mentoring skills to achieve results, transfer knowledge more effectively.
- 2.8 Acquired fundamental knowledge, framework and associated innovative tools on design and redesign process of product at Six Sigma level.

3. Entry requirements for the training course and professional registration:

- 3.1 Selected by the SSI interview panel, demonstrates leadership potential to achieve dramatic business results to participant's organization.
- 3.2 Completed Six Sigma Black Belt Certification Programme before attending Training for Six Sigma Trainers and Project coaching modules
- 3.3 Eligible to be registered as Registered MBB upon completing all MBB modules and able to meet assignment and examination requirements of all modules.

4. Course Leader

Ir. Dr. YK Chan, Chairman of Six Sigma Institute, Managing Director of SBTI-Hong Kong Ltd, Post-doctoral Scholar (Oxford), Doctor of Engineering (Warwick), Doctor of Management (IMC/USC), Registered Professional Engineer, Registered Six Sigma Master Black Belt, Certified Six Sigma Black Belt Teacher, Registered Lean Specialist, TOCICO Certified TOC Practitioner, Visiting Professor of Beijing Normal University and Industrial Fellow of University of Warwick, U.K..

Ir. Dr. YK Chan has over 30 years of managerial experience in both manufacturing and servicing industries. Being a pioneer of Lean Six Sigma development journey in Hong Kong, he has led over 100 Lean Sigma projects and trained over 25000 Lean Six Sigma professionals, including Six Sigma Master Black Belts, Lean Six Sigma Black Belts and Six Sigma Green Belts, Lean Specialists, Lean Leaders, Lean Practitioners, as well as TOC professionals.

5. Certifications & Qualifications:

Students have passed all the assignments and examination requirements of the modules will gain:

- A complete certificate of Six Sigma Master Black Belt
- An individual certificate for each of the modules

Students who have completed the module(s) are also qualified to register the following professional status:

- Registered Six Sigma Master Black Belt and use the title of RSSMBB *
- Registered Design for Six Sigma Practitioner and use the title of RDFSSP #
- Registered Six Sigma Champion and use the title of RSSC ^
- Registered Six Sigma Trainer and use the title of RSST

* Student has to complete all of the MBB modules and also registered as RSSBB or RLSBB first.

Completed a DFSS project and passed the assessment. Participants who choose this option should pay an assessment fee of \$1,000.

^ Fulfill requirements of RSSC registration (please visit our website).

6. Detail of the Courses

Course Code: MBB-2020 *

**If you want to enrol all modules in one time.*

7. Course Fee & Discounts

Please contact us for more details:

Tel. +25812771

Email: info@ssi.org.hk

Module 1

Certificate in Innovative Approach of Management - TOCLSS

Duration:	4 days, 32 hours
Course Requirements:	1-hour presentation of TOCLSS project
Certificate:	■ A module certificate

<p>Course Content:</p> <p>1.1 Introduction</p> <p>1.2 TOCLSS Overview</p> <p>1.3 Exercise</p> <p>1.4 TOC Performance Measurements</p> <p>1.5 Using Y, I, & OE for Decision Making</p> <p>1.6 WXYZ Case Exercise</p> <p>1.7 The TOC Game</p> <p>1.8 TOC for Operations</p> <p>1.9 DBR Design and Management</p> <p>1.10 Simplified DBR</p> <p>1.11 DBR Case Studies</p> <p>1.12 TOC Scheduling – Transfer Batches</p> <p>1.13 Exercise – Transfer Batch</p> <p>1.14 Example of Transfer Batch – Answer</p> <p>1.15 Production Flows of Different Types of Plants</p> <p>1.16 Supply Chain Systems</p> <p>1.17 Supply Chain Game</p> <p>1.18 SCM Performance Measures</p> <p>1.19 Simulation performance in the optimization of the supply chain</p> <p>1.20 TOC case studies</p> <p>1.21 Critical Chain Project Management</p> <p>1.22 Three Improvement Phases and Thinking Process</p> <p>Case Studies:</p> <p>1. Insertion Machine Manufacture</p> <p>2. Toys manufacture</p> <p>3. Supply Chain</p>	<p>1.23 Case Example – Application of Thinking Process in Manufacturing</p> <p>1.24 Case Example – Application of Thinking Process in Service</p> <p>1.25 TOC Improvement Roadmap</p> <p>1.26 Strategy and Tactic Tree</p> <p>1.27 TOC Marketing Solution</p> <p>1.28 TOC Sales Buy-in Application</p> <p>1.29 TOC and People</p> <p>1.30 TOCLSS Integration and Models</p> <p>1.31 Case Example – Application of TOCLSS in Healthcare</p> <p>1.32 Case Example – Application of TOCLSS in Project management</p> <p>1.33 Case Example – Application of TOCLSS in Manufacturing</p> <p>1.34 Case Example – Application of TOCLSS in Supply Chain</p> <p>1.35 Case Example – Application of TOCLSS in Service</p> <p>1.36 Case Example – Application of TOCLSS in IT Implementation</p> <p>1.37 Integrating Six Sigma and Theory of Constraints for Continuous Improvement – A Case Study</p> <p>1.38 Overview of the TOCICO Exams</p> <p>Individual Project Examination: Present your project in the class (1 hour)</p> <p>4. IT Implementation</p> <p>5. Service</p> <p>6. Finance</p>
--	--

Objectives:

- Diagnostic skills to identify certain of critical areas of complex organization systems that limit the outputs of the company.
- Ability to use SSI's TOCLSS (pronounce as TOP-CLASS) approach for providing holistic improving strategies for rapid business results.

World-wide professional recognition:

Participants should have the knowledge and ability to pass the Fundamentals Examination of the Theory of Constraints International Certification Organization (TOCICO).

Please visit our website: ssi.org.hk to view more details of the registration, or contact us: 2581 2771

Module 2

Certificate in Advanced Six Sigma Tools (ASST)

Duration:	4 days, 30 hours
Course Requirements:	2 hours written examination
Certificate:	■ A module certificate

Course Content:

2.0	Review of Hypothesis Testing and Regression Analysis	2.3	Advanced Capability Analysis
2.1.	Advanced DOE	2.3.1	Capability Analysis for Weibull data
2.1.1.	Review of DOE Methods	2.3.2.	Capability Analysis for Poisson data
2.1.2.	Response Surface Design	2.3.3.	Capability Analysis for Binomial data
2.1.2.1.	Central Composite and Box-Behnken Designs	2.4.	Advance Regression Analysis
2.1.2.2.	Sequential Experimentation	2.4.1.	Logistic Regression
2.1.2.3.	Optimization	2.5.	Forecasting Techniques
2.1.3	Steepest Ascent Method	2.5.1.	Time Series Analysis
2.1.4.	Multiple Response	2.5.2.	Moving Average Methods
2.1.5	Mixture Designs	2.5.3.	Exponential Smoothing Methods
2.1.6.	Takeuchi Method	2.5.4.	Autocorrelation
2.2.	Advance SPC	2.5.5.	Seasonal Analysis
2.2.1	Cusum Chart	2.6.	Simulation
2.2.2.	EWMA Chart		
2.2.3.	Cumulative Count Chart		
2.2.4.	Multivariate Chart		
2.2.5.	Pre-Control Chart		
2.2.6.	Cases and examples		

Objectives:

Advanced Lean and Six Sigma tools and capabilities for tracking complex Lean and Six Sigma problems.

Module 3

Certificate in Training for Six Sigma Trainers (TT)

Duration:	1 day
Course Requirements:	Prepare 1 hour training material of assigned topic, and also asses other participants' topic
Certificate:	■ A module certificate

Course Content:

- 3.1 Structure the Learning Activities
- 3.2 Formulation of Training plans
- 3.3 Effectively Creating and Controlling the Learning Environment
- 3.4 Teaching, Coaching and Consultancy Techniques
- 3.5 Practices
- 3.6 Individual Assignment: Teach an assigned subject
- 3.7 Examination – Presentation of your assigned project (1 hour)

Objectives:

Effective training skills for conducting in-house Green Belt and Black Belt courses.

Module 4

Certificate in Coaching of Six Sigma Projects (PC)

Duration:	1 day, 7 hours
Course Requirements:	Submit written report of a coached project
Certificates:	■ A module certificate

Will be conducted in English upon request

Course Content:

- 4.1 Coach-Belt Contracting as the Base
- 4.2 Key Questions the Coach Should Ask
- 4.3 Common Coaching Mistakes
- 4.4 The GROW Model for Coaching
- 4.5 Tools for the Coaching Process
- 4.6 Success Factors in Coaching
- 4.7 Practices
- 4.8 Individual Assignment: Coaching a real project
- 4.9 Examination – Presentation of your coaching report

Objectives:

- Dramatic Project coaching and management skills to ensure successful project completion.
- Mentoring skills to achieve results, transfer knowledge more effectively.

Module 5

Certificate in Six Sigma Management Leader (SSML)

Duration:	1 day, 6 hours
Course Requirements:	Nil
Certificates:	■ A module certificate

Course Content:

- 1.1 Principles of Six Sigma Management
- 1.2 Six Sigma Leadership and Change Management
- 1.3 The Role of Six Sigma Champion
- 1.4 Bringing Six Sigma to achieve company objectives
- 1.5 Aligning Six Sigma Projects with company strategic goals
- 1.6 Developing Six Sigma professionals as future leaders
- 1.7 Award and Recognition
- 1.8 Six Sigma Deployment Plan
- 5.8 Project Management and Evaluation
- 1.9 Aligning Six Sigma with Business Excellence Model
- 1.10 Aligning Six Sigma to other management systems
- 1.11 Introduction to Six Sigma Management Standard

Objectives:

Leadership skills for organization-wide Lean Six Sigma deployment and management skills for success implementation and sustain the scheme.

Module 6

Certificate in Design for Six Sigma (DFSS)

Duration:	2 days, 12 hours
Course Requirements:	Nil
Certificates:	■ A module certificate

Course Content:

- 6.1 Six Sigma Solution and Roadmap for Product Life Cycle
- 6.2 Introduction to DFSS
- 6.3 Main Technical Tools for DFSS
 - 6.3.1 Quality Function Deployment (QFD)
 - 6.3.2 System Design
 - 6.3.3 Design for X
 - 6.3.4 Applicable Reliability Engineering Tools
 - 6.3.5 Robust Design
 - 6.3.6 Design Validation Tools
- 6.4 DFSS Project Management
- 6.5 A Case Study of DFSS
- 6.6 TRIZ Inventive Problem Solving Theory
- 6.7 Workshop-Like Exercises on the Class (Conducted in the Related Parts)

Objectives:

Acquired fundamental knowledge, framework and associated innovative tools on design and redesign process of product at Six Sigma level.

Organizer



Sponsor

Application Form 申請表格



Course code 課程編號 (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/博士): _____
English Name 英文姓名 (Mr./Miss/Mrs./Dr.): [Surname 姓氏] _____ [First Name 名字] _____
Alias 別名 _____ Age 年齡: 18-25 26-35 36-45 46-55 56+
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 _____
Contact No. 聯絡電話 (May deliver message via WhatsApp 可能會以 WhatsApp 形式傳遞資訊): _____
E-mail Address 電子郵箱: _____
Correspondence Address 通訊地址 (The certificate will be sent to this address 課程證書將發送到這個地址): _____

Company Name 公司名稱: _____
Industry 行業: _____ Office Tel. 辦事處電話: _____ Department 部門: _____
Position 職位: _____ Job Nature 工作性質: _____
Years of experience 年資: 1 - 5 years 年 6 - 10 years 年 11 - 20 years 年 21+年

Company Address 公司地址: _____

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
 Eventbrite 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 are required to settle course fees 2 weeks before the course commencement date. 一般學員必須於開課前 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。
Fail to settle payment before deadline results in cancellation of application or suspension from taking subsequent courses. 未能如期付款者的申請將不獲保留或導致申請者被取消上課資格。

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 信用卡網上繳費** (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」繳費並於銀單號碼欄填寫閣下 8 位數字的電話號碼。)
- PPS By Internet 網上繳費** (Login your PPS account through website: www.ppsk.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. 請於繳費網頁 www.ppsk.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。)
- PPS By Phone 電話繳費** (Please open a PPS account and register the bill by calling 18011 if you have not. Dial 18031 to pay the bill and enter '9983' as merchant code. Please keep the payment reference number for record. 請先開立繳費戶口及致電 18013 登記此賬單, 致電 18033 繳付賬單並輸入商戶編號「9983」, 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。)

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: _____

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註冊專業資格服務，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，其中申請方可獲得接納。
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。

備註：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. 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。