

# **Certified Six Sigma Black Belt Refresher Course Syllabus QCTC 1001**

**Instructors:** Mike Harkins, Eric Brown, Richard Schuldt, Phil Flories, Johnny Chao

**Phone:** 512.223.7662 (Bob McGoldrick - Coordinator)

**Course Time:** 6:00 PM - 9:00 PM

**Place:** ACC Highland Business Center, 5930 Middle Fiskville Road, Austin

**Room:** TBD

**Length of Course:** 60 Hours

**Class Days:** Monday and Wednesday evenings

## **Course Description:**

This course is a refresher study of the Body of Knowledge for the Certified Six Sigma Black Belt. Topics include business process, quality management techniques, project management, DMAIC methodology, statistical applications and methods, design of experiments, lean enterprise, and design for six sigma. The student will focus on the methodology and application of these Black Belt skills by studying the assigned materials and taking sample exams containing questions similar to those on the actual CSSBB exam. These sample exams and their answers will be reviewed in class and for homework to increase the student's ability to understand and correctly answer exam questions.

**Course Objective:** This course prepares students for the American Society for Quality (ASQ) "Six Sigma Black Belt" certification. Passing a separate examination, given twice per year by ASQ, will grant certification. Since the course is intended to be a refresher course, students are expected to have some familiarity with most elements of the body of knowledge through work and/or educational experience.

## **Rationale:**

The CSSBB refresher course is offered to equip the quality professional to successfully pass the ASQ CSSBB exam. By obtaining the certification, the quality professional will improve quality in the Austin area.

## **Evaluation:**

The evaluation criteria is passing grade on the CSSBB exam practice exams.

## **Texts:**

### Required:

*Certified Six Sigma Black Belt Primer with Solution Text* from Quality Council of Indiana (812-533-4215)

### Recommended:

*Quality Engineering Statistics* by Robert A. Dovich (ASQ 800-248-1946)

*Implementing Six Sigma* by Forrest Breyfogle, Smarter Solutions (512-918-0280)

# Prerequisites for CSSBB Refresher Class

- Be sure you are qualified to take the exam. This will be covered the first day of class and is contained in the Certified Six Sigma Black Belt brochure from ASQ. ASQ will provide a copy free of charge by calling their toll free number 800-248-1946. The lead instructor will provide a copy of this brochure to students the first day of class.
- Obtain written course materials: *CSSBB Primer*, *Quality Engineering Statistics* from sources listed above. Other books, *Lexicon of Quality Terms*, *Implementing Six Sigma*, are optional, but highly recommended.
- Fill out the exam application and enclose payment to sit for the exam. See the exam application, contained in the CSSBB brochure, or obtainable at ASQ's web site (<http://www.asq.org/standcert/cert.html>) for costs. The deadline for applying for the Oct. 18 exam is August 22, 2003.

## Class Recommendations

- Attend class: Since this is a Continuing Education course, there is a requirement for you to meet the contact hours (60) for the class. Role will be taken at each class and must be submitted to ACC. If you must be absent, please notify the instructor so that you will receive all materials and have all questions answered.
- Develop and use good study habits. It is recommended that you spend at least the same amount of time studying and reading outside class as in class.
- Take practice exams at home. Go through all questions in the blue pages of the primer and try to select the right answer. It is OK to use the other pages for reference, as in the real exam, but time yourself. You have to answer an average of one question every 1.5 minutes.
- Read material before the class in which they are covered. The course schedule shows what parts of the Primer are to be covered in class.
- Ask questions. Your instructors welcome questions in class. Save questions you might have during study time, if possible, so that the entire class can learn.
- Keep in mind, that some of the questions are phrased in a way that might lead you to a wrong answer, so read the question carefully before answering. We will discuss this further in class.

Fall 2003 CSSBB Refresher Course Plan									
Session No.	Day of Week	Class Date	Instructor	Topic	Primer Section		Total Pages by Section	Total Pages by Class	Overhead Pages
					Section	Pages			
1	Mon	Aug. 11	M. Harkins	Introduction to CSSBB Certification	I	1-18	18	18	
2	Wed	Aug. 13	M. Harkins	Enterprise-wide Deployment	II	1-52	52	52	
3	Mon	Aug. 18	M. Harkins	Business Process Management	III	1-70	70	70	
4	Wed	Aug. 20	E. Brown	Project Management	IV-A,B	1-39	39	39	
5	Mon	Aug. 25	E. Brown	Project Management	IV	40-88	49	49	
6	Wed	Aug. 27	E. Brown	Six Sigma - Define	V	1-22	22	22	
7	Mon	Sep. 1	R. Schuldt	Six Sigma - Measure	VI-A,B	1-20	20	20	
8	Wed	Sep. 3	R. Schuldt	Six Sigma - Measure	VI-C	21-46	26	26	
9	Mon	Sep. 8	R. Schuldt	Six Sigma - Measure	VI-D	47-71	24	24	
10	Wed	Sep. 10	R. Schuldt	Six Sigma - Measure	VI-E,F	72-132	50	50	
11	Mon	Sep. 15	R. Schuldt	Six Sigma - Analyze	VII-A,B2	1-30	30	30	
12	Wed	Sep. 17	R. Schuldt	Six Sigma - Analyze	VII-B3,B6	31-67	37	37	
13	Mon	Sep. 22	R. Schuldt	Six Sigma - Analyze	VII-B7,B8	68-88	21	21	
14	Wed	Sep. 24	P. Flories	Six Sigma - Improve	VIII-A1,A4	1-30	30	30	
15	Mon	Sep. 29	P. Flories	Six Sigma - Improve	VIII-A5,A6	31-48	18	18	
16	Wed	Oct. 1	P. Flories	Six Sigma - Improve	VIII-A7,C	49-66	17	17	
17	Mon	Oct. 6	P. Flories	Six Sigma - Control	IX-A1,A5	1-35	35	35	
18	Wed	Oct. 8	P. Flories	Six Sigma - Control	IX	36-64	29	29	
19	Mon	Oct. 13	J. Chao	Lean Enterprise	X	1-60	60	60	
20	Wed	Oct. 15	J. Chao	Design for Six Sigma	XI	1-58	58	58	