



# Introduction to Six Sigma

## *Course Overview and Learning Objectives*

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**Note:** This outline is identical for the Financial Services and Services versions. The difference for each course lies in the customized case studies, examples and exercises.

### **SUMMARY**

MoreSteam University offers the Introduction to Six Sigma online course as a high quality and high flexibility alternative to traditional training programs. All course material is available online, so sessions may be started and stopped at any point - content is delivered on-demand according to the demands of your schedule.

This course provides an overview of Six Sigma concepts and language and an introduction to the Define-Measure-Analyze-Improve-Control process improvement cycle. The Six Sigma Overview course is comprised of one session with interactive practice modules and an online quiz.

### **LEARNING OBJECTIVES**

The overall learning objective of this course is to provide a first step toward successful implementation of Lean Six Sigma methods by developing familiarity with the basic concepts and language of Lean Six Sigma. After completing this course, you should be able to do the following:

- Communicate using Lean Six Sigma concepts.
- Relate Lean Six Sigma concepts to the overall business mission and objectives.
- Accept the need to improve organizational performance to meet the requirements of the marketplace.
- Use the concept of a Sigma Level to evaluate the capability of a process or organization.
- Think about your organization as a collection of processes, with inputs that determine the output.
- Recognize the five step D-M-A-I-C model used to improve processes.
- Recognize the organizational factors that are necessary groundwork for a successful Lean Six Sigma program.
- Understand how Lean Methods and Six Sigma are integrated into a single process improvement initiative to achieve higher quality and greater process speed.

## COURSE STRUCTURE AND REQUIREMENTS

MoreSteam courses provide content-on-demand to offer the highest degree of student flexibility. You can set your own schedule and progress at your own speed, terminating and re-entering sessions whenever you wish.

All course sessions use a mix of multimedia to present material, including text, synchronized audio slide shows, diagrams, charts, audio lectures, and simulations. Links to outside research resources are provided to explore chosen subjects in greater detail. Course access is provided for **60 days** beginning at the time of enrollment.

As you work through the course you will be asked to demonstrate knowledge and understanding in four ways:

- Interactive **Practice Exercises** will be presented throughout each session so that you can try your new skills and get immediate feedback.
- **Quizzes** will be conducted at the end of every session. Quizzes are interactive, and provide immediate feedback to close the learning loop.

## COURSE SEQUENCE

The course is presented in a logical sequence to provide an introduction to Lean Six Sigma concepts and the D-M-A-I-C improvement process. The lessons are modular, and we encourage you to explore the material. You are free to move forward and backward throughout the course. You can skip ahead or go back and review material that you already covered.

The course map feature allows you to move point to point, from anywhere to anywhere. The course map status column will tell you which pages you have not visited.

## HOW TO NAVIGATE AND USE RESOURCES

Navigation aids are located in the Navigation Frame to the left of the text screen, and can be activated by clicking on the icon or text.

- Return to the MoreSteam University home page by clicking on the icon in the upper left corner of the navigation frame.
- Click on **Course Overview** (the course name) in the navigation box to return to this page to review course requirements or other general information.
- Consult the dynamic **Course Map** to identify your current location or to move around the course. The Course Map bookmarking feature will take you back to the point where you last terminated your session.
- Join a Virtual Classroom Discussion through the **Discuss** link. The Virtual Classroom Discussion is a threaded discussion forum among all current students, with input from the instructor.
- Access the MoreSteam **Toolbox** through the navigation box to research process improvement tools.
- The **"What's New"** link highlights recent modifications to the course. This window will automatically appear upon log-in whenever there is a new update.
- Outside Research **Resources** provides links to useful websites and recommended books.
- The **"Instructor"** link provides a shortcut to send an email to the course instructor.
- Access a notepad to record your class notes by clicking on **"Notes"** link in the navigation box.

Notes will be indexed by your current course location for easy reference, and can be printed in summary form.

- The "**Account Info**" link provides a vehicle to update your email address, phone number, or location, and shows the number of access days remaining.
- The "**Quiz Stats**" link provides a summary of quiz results by session, including detail on any skipped or missed questions.
- The "**SigmaPedia**" link opens SigmaPedia, online Lean Six Sigma encyclopedia.
- The "**StatMaster**" link opens an interactive wizard to guide statistical analysis.
- From any point in the course you can open a D-M-A-I-C flowchart by clicking on the **Six Sigma icon** in the lower left corner of the navigation bar.
- The **Help** icon in the lower left corner of the navigation bar opens an Internal Search Function and a Glossary of Terms:
- Synchronized audio slide shows will display without use of a separate media player, but you must enable your browser to read Java (Tools/Internet Options/Advanced/Microsoft VM/Check All Boxes). When you see a slide show icon displayed in the right margin of the course, click on the icon to load the media.

## **CERTIFICATE OF COMPLETION**

Upon completion of this course (review of all lessons and completion of quiz modules) a certificate of completion will be provided.

## **COURSE MATERIALS**

### **Materials Provided by MoreSteam**

The course includes Microsoft® Excel® templates for problem solving and statistical analysis. The templates are available as downloads within the course material.

### **Materials Provided by Student/Company**

- General-purpose statistics software is useful but not necessary. Excel templates are provided by the course for statistical analysis. If you do not have a statistics package, options range from free internet downloads to higher-end packages like Minitab, Statistica, JMP etc. You can download a 30-day evaluation copy of most statistics packages over the web.
- Microsoft Office (Word, Excel, PowerPoint). Office 2003 or higher is recommended. Office 97 and 2000 do not take advantage of all Excel template features.

## **SUPPORT**

- Use the on-screen Help feature for a glossary of terms and site search.
- You can also contact the Course Instructor by email.