SUMMARY
This Design for Six Sigma course is comprised of six separate sessions. Each session is a collection of related lessons, and includes an interactive quiz at the end of the session. Many of the lessons include interactive practice exercises. All course material is available online, and sessions may be started and stopped at any point - content is delivered on-demand according to your schedule.

By completing this course of study, you will gain a solid general knowledge of the tools, methods and best practices necessary for developing products and processes that can meet Six Sigma levels of quality.

It is important to understand that the DFSS course itself does not represent a generic development process. The course is laid out as a process to facilitate orientation to your organization’s own development process. After going through the course and understanding the purpose and application of the various tools, methods and best practices, you should compare the content of the course to the tools, methods and best practices in your organization's development process.

This process of comparison will highlight gaps between your organization's process and its potential as a DFSS development process. You will then be able to close the gap by integrating the missing material into your organization's process.

LEARNING OBJECTIVES
The overarching learning objective of this course is to introduce a set of best practices and methodologies essential for developing product or process designs that meet customer requirements at the highest possible level of quality.

After completing this course, you should be able to do the following:

- Communicate using Design for Six Sigma concepts.
- Identify areas within your existing development process where DFSS is needed.
- Integrate DFSS into your existing development process.
- Select optimal product or process design concepts.
- Use analytical and experimental methods to develop robust and reliable designs.
- Modify designs for optimal performance based on variability of the inputs and desired outputs.
- Verify that the designs meet the requirements at the desired level of performance.
- Employ your Design for Six Sigma skills to lead a successful development project delivering meaningful results to the organization.
PREREQUISITES

Participants in this course should have previously mastered the Six Sigma Black Belt body of knowledge, specifically including Measurement System Analysis, Multiple Regression Analysis, and basic Design of Experiments. If you have not mastered this body of knowledge, MoreSteam.com provides a Six Sigma Black Belt course, which would provide appropriate preparation.

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 270 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.
- Supplemental Exercises will be presented at the end of every session to practice new concepts. Supplemental Exercises are self-graded and may be shared in the Virtual Classroom Discussion area.
- 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 follow the DCOV representation of DFSS. We believe that you will learn most efficiently by following the sequence presented. The sessions 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 "StatMaster" link opens an interactive wizard to guide statistical analysis.
• The “Templates” link opens a Web page that links to the entire set of Microsoft® Excel® templates available for the course.
• From any point in the course you can open a DFSS flowchart by clicking on the DFSS - DCDOV 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.

COURSE MATERIALS

Materials Provided by MoreSteam

• Design-Expert Software for Design of Experiments by Stat-Ease (a $995 value)
• Roller Coaster Tycoon 2® video game (a $20 value). Please allow two weeks to receive shipment.
• Microsoft Excel templates for statistical analysis, available as downloads within the course material.

The DOE software, RSM Simplified book, and Roller Coaster Tycoon will be shipped to your mailing address within two weeks of starting the course. **Non-U.S. Customers:** Please note that you will be responsible to pay any local customs duties or taxes. The value of the software and book is approximately $1150. A memo invoice will be included in the shipment for customs purposes.
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 2000 or higher is recommended. Office 97 does not take advantage of all Excel template features.

CERTIFICATE OF COMPLETION

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

SUPPORT

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