

GSAW 2023 Tutorial H:

Six Sigma Green Belt Tutorial

Overview:

Our work lives are filled with processes for accomplishing our business, scientific, and engineering endeavors. When processes work efficiently, we accomplish much, but when they work poorly, our work can be stifled. Six Sigma methodology provides tools for improving processes. An overview of the Green Belt Six Sigma Coursework will be given to attendees.

Learn how to implement the Six Sigma DMAIC (Define, Measure, Analyze, Improve, and Control) process. Learn the tools for each DMAIC phase and how to apply them to make groundbreaking improvements that can support enhancing your company's bottom-line results. This tutorial will provide attendees with a toolbox of techniques that can be utilized to improve operations for the enterprise and for programs. These techniques can be applied equally to enterprise processes, and ground systems hardware and software.

In addition to learning the tools, attendees can choose to conduct their own process improvement project after GSAW and become an Aerospace Six Sigma Green Belt.

- Why should you attend?
 - Attend Green Belt Six Sigma Tutorial to become an agent of improvement at your organization:
 - Improve business process capabilities
 - Reduce costs and defects
 - Increase profits, productivity, and quality of your products/services
 - Boost employee morale
- Benefits to Green Belt Training Tutorial
 - Solving the root cause of problems, rather than treating the symptoms.
 - Managing performance with validated data and eliminating guess-work.
 - Developing a culture of continuous improvement.
 - Improve your stakeholder management and communication skills.

Instructors: Yvette Harris and Daniel Houston, The Aerospace Corporation

Biographies:

Yvette Harris, LSSBB, CQM-OE, MSEM is currently the is the Associate Principal Director for CQMO. Prior to joining Aerospace, she worked for Raytheon as a Senior Manager of Mission Assurance at Raytheon in El Segundo, where she was the mission assurance and engineering leader of 12 Program Quality Managers and Engineers. Through her twenty plus year career, Ms. Harris has held several engineering organizational titles of Global Quality Director, Senior Manager Quality, Global Manufacturing Technology Program Manager, Regional Quality/CI Manager, NA Powder Coating Business Manager, LSSBB, Energy Engineering Consultant, Sales, Technical Services Leader, Lead Process and Production Engineering.

Yvette Harris earned a B.S. Chemical Engineering at the University of California, Berkeley, M.S. Engineering Management at Drexel University, and is currently pursuing her PhD in Business Management at Capella University. Yvette has taught and mentored several Green Belt candidates. Yvette earned her Lean Six Sigma Black Belt Certification in 2009.

Dr. Dan Houston is currently Director of the Software Process, Modeling, and Measurement Department in the Aerospace Software Engineering Subdivision. Prior to joining Aerospace in 2008, he

worked 16 years at Honeywell, Inc. as a software developer, Six Sigma Black Belt, and software metrician. As a Six Sigma Black Belt, he taught and mentored Green Belt candidates. He also worked on a small team that developed the curriculum for Software Design for Six Sigma and trained all Honeywell software engineers in it.

Dr. Houston earned a B.S. Mechanical Engineering at the University of Texas and a Ph.D. in Industrial Engineering from Arizona State University where his doctoral research applied simulation to the study of software development risk factors. His presentations, reports, book, and peer-reviewed journal publications address quantitative aspects of software and systems development, including economics, measurement, simulation, and statistical analysis.

Description of Intended Students and Prerequisites:

Intended for engineers.

What can Attendees Expect to Learn:

- Use proven Six Sigma problem-solving methods and statistical tools
- Apply techniques for collecting and analyzing data
- Identify risks and mitigate process operational risks
- Reduce wasted effort by reducing inefficiencies
- Solve business, process, and quality improvement projects using DMAIC methodology