COURSE OVERVIEW SS0037

ASQ Approved Lean Six Sigma Certification – Black Belt

(One Week Awareness)

Course Title

ASQ Approved Lean Six Sigma Certification – Black Belt *(One Week Awareness)*

Course Date/Venue

October 19-23, 2025/Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE

Course Reference

SS0037

Course Duration/Credits

Five days/3.5 CEUs/35 PDHs

Course Introduction

80% of this course is practical sessions where participants will be engaged in a series of interactive small groups, class workshops and role-plays.

This course is designed to provide participants with a detailed and up-to-date overview of black belt lean six sigma. It covers the foundation of Lean and Six Sigma; the drivers, metrics, projects and theory of constraints; the customer data, project planning tools, project documentation and basic lean six sigma metrics; and the team dynamics and performance, measure, minitab, process mapping, cause and effect analysis, FMEA and probability and statistics.

Further, this course will also discuss the measurement system analysis, data collection; process capability, analyze phase and hypothesis testing; the ANOVA, regression, chi-square, graphical analysis, lean analysis tools, phase transition and lean improvement tools; the design of experiments as well as DoE Golf Experiment; the implementation and validation of the solutions, improving phase transition, and controlling phase; and the standard work, control charting, control plans, and control phase transition

During this interactive course, participants will learn the enterprise leadership, roadblocks, change management and team management; the benchmarking, performance measures, financial measures and team management; the charter and tracking, measure phase, data types, exploratory data analysis, probability, advanced process capability and analyzing phase; the regression, multivariate, logistic regression, statistical versus practical significance, sample size, central limit theorem and confidence intervals; the non-parametrics, GB DOE refresher minitab, fractional factorial experiments, catapult, split plot designs, design for six sigma and advanced lean tools; the implementation and pilot improvements, the acceptance sampling plans, and total productive maintenance; and the visual management, measurement system reanalysis, control plan and sustain improvements.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on black belt lean six sigma
- Discuss the foundation of Lean and Six Sigma, drivers, metrics, projects and theory of constraints
- Identify customer data, project planning tools, project documentation and basic lean six sigma metrics
- Review team dynamics and performance, measure, minitab, process mapping, cause and effect analysis, FMEA and probability and statistics
- Carryout measurement system analysis, data collection, process capability, analyze phase and hypothesis testing
- Determine ANOVA, regression, chi-square, graphical analysis, lean analysis tools, phase transition and lean improvement tools
- Discuss design of experiments as well as DoE Golf Experiment
- Implement and validate solutions, improve phase transition, control phase and apply standard work, control charting, control plans and control phase transition
- Carryout enterprise leadership, handle roadblocks and apply change management and team management
- Employ benchmarking, performance measures, financial measures and team management
- Recognize charter and tracking, measure phase, data types, exploratory data analysis, probability, advanced process capability and analyze phase
- Explain regression, multivariate, logistic regression, statistical versus practical significance, sample size, central limit theorem and confidence intervals
- Identify non-parametrics, GB DOE refresher minitab, fractional factorial experiments, catapult, split plot designs, design for six sigma and advanced lean tools
- Review implementation and pilot improvements as well as apply acceptance sampling plans and total productive maintenance
- Employ visual management, measurement system reanalysis, control plan and sustain improvements

Who Should Attend

This course is intended for those who are from diverse organizational functions such as operations, quality, logistics, finance, production, engineering and other staff functions seeking to bring significant business results to their organizations. Participants are traditionally well versed in technical aspects of their jobs, are team leaders and are effective project facilitators.

Certificate Accreditations

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

- The International Accreditors for Continuing Education and Training (IACET - USA)

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **3.5 CEUs** (Continuing Education Units) or **35 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Mr. Dimitry Rovas, CEng, MSc, PMI-PMP, SMRP-CMRP is a **Senior Management Consultant** with extensive industrial experience in **Oil**, **Gas**, **Power** and **Utilities** industries. His expertise includes **Leadership** & **Change** Management, **Talent** Management, **Presentation** Skills, **Negotiation** Skills, **Interpersonal** Skills, **Communication** Skills, **Collaboration** Skills, Developing **Effective Partnership**, **Developing & Managing Budget**, **Technical Design & Development**, **Analytical & Troubleshooting** Techniques, **Interpersonal** Skills, **Leadership & Mentoring**, **Time** Management, **Performance** Management, **Strategic Planning & Analysis and Communication & Reporting** Skills, **Project** Management, **Construction** Management, **Project Management Planning & Control Techniques**, **Project Risk** Management, **Quality** Management, **Project Acceleration** Techniques, **Scope Control** Management, **Contract** Management, **Asset** Management, **Procurement & Purchasing** Management, **Warehousing**, **Quality Management System** (**QMS**) and **Business** Management. Further, he is also well-versed in **Energy Conservation**, **Electricity Distribution Systems**, **Energy Saving**, **Combined Cycle Power Plant**, **Gas & Steam Turbines**, **Heat Transfer**, **Machine Design**, **Fluid Mechanics**, **Heating & Cooling** Systems, **Heat Insulation** Systems and **Heat Exchanger & Cooling Towers**. He was the **Project Manager** wherein he was managing, directing and controlling all activities and functions associated with the domestic heating/cooling facilities projects.

During his life career, Mr. Rovas has gained his practical and field experience through his various significant positions and dedication as the **EPC Project Manager**, **Field Engineer**, **Preventive Maintenance Engineer**, **Researcher**, **Instructor/Trainer**, **Telecom Consultant** and **Consultant** from various companies such as the Podaras Engineering Studies, Metka and Diadikasia, S.A., **Hellenic Petroleum Oil Refinery** and COSMOTE.

Mr. Rovas is a **Chartered Engineer** of the **Technical Chamber** of **Greece**. Further, he has **Master's** degree in **Mechanical Engineering** and **Energy Production & Management** from the **National Technical University of Athens**. Moreover, he is a **Certified Instructor/Trainer**, a **Certified Maintenance and Reliability Professional** (**CMRP**) from the Society of Maintenance & Reliability Professionals (**SMRP**), a **Certified Project Management Professional** (**PMP**), a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**) and a **Certified Six Sigma Black Belt**. He is an active member of Project Management Institute (**PMI**), Technical Chamber of Greece and Body of Certified Energy Auditors and has further delivered numerous trainings, seminars, courses, workshops and conferences internationally.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee

US$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1:	***Sunday, 19th of October 2025***
0700 – 0730	*Registration & Coffee*
0730 – 0745	*Welcome & Introduction*
0745 – 0800	***PRE-TEST***
0800 – 0815	***Overview & Foundation of Lean & Six Sigma***
0815 – 0845	***Drivers & Metrics***
0845 - 0915	***Projects***
0915 – 0930	*Break*
0930 – 1000	***Theory of Constraints***
1000 - 1030	***Customer Data***
1030 - 1045	***Project Planning Tools***
1045 - 1100	***Project Documentation***
1100 – 1115	*Break*
1115 – 1130	***Basic Lean Six Sigma Metrics***
1130 - 1145	***Team Dynamics & Performance***
1145 - 1215	***Overview of Measure***
1215 - 1245	***Introduction to Minitab***
1245 – 1315	*Prayer Break/Lunch*
1315 – 1330	***Process Mapping***
1330 - 1345	***Cause & Effect Analysis***
1345 - 1415	***FMEA***
1415 - 1450	***Probability & Statistics***
1450 – 1500	***Recap***
1500	*Lunch & End of Day One*

Day 2: Monday, 20th of October 2025

0700 – 0730	***Measurement Systems Analysis***
0730 – 0800	***Data Collection & Summary***
0800 - 0830	***Process Capability***
0830 - 0915	***Analyze Phase Overview***
0915 – 0930	*Break*
0930 - 1000	***Hypothesis Testing***
1000 - 1030	***ANOVA***
1030 - 1100	***Regression***
1100 – 1115	***Chi-square***
1115 – 1130	*Break*
1130 - 1145	***Graphical Analysis***
1145 - 1215	***Lean Analysis Tools***
1215 - 1245	***Analyze Phase Transition***
1245 – 1315	*Prayer Break/Lunch*
1315 – 1330	***Improve Overview***
1330 - 1345	***Lean Improvement Tools***
1345 - 1415	***Introduction to Design of Experiments***
1415 - 1450	***DoE Golf Experiment***
1450 – 1500	***Recap***
1500	*Lunch & End of Day Two*

Day 3: Tuesday, 21st of October 2025

0700 – 0730	***Implementation & Validation Solutions***
0730 – 0800	***Improve Phase Transition***
0800 - 0830	***Control Phase Overview***
0830 - 0915	***Standard Work***
0915 – 0930	*Break*
0930 - 1000	***Control Charting***
1000 - 1030	***Control Plans***
1030 - 1100	***Control Phase Transition***
1100 – 1115	***Enterprise Leadership***
1115 – 1130	*Break*
1130 - 1145	***Handling Roadblocks***
1145 - 1215	***Change Management & Team Management***
1215 - 1245	***Benchmarking***
1245 – 1315	*Prayer Break/Lunch*
1315 – 1330	***Performance Measures***
1330 - 1345	***Financial Measures***
1345 - 1415	***Team Management***
1415 - 1450	***Voice of the Customer***
1450 – 1500	***Recap***
1500	*Lunch & End of Day Three*

Day 4:	Wednesday, 22nd of October 2025
0700 – 0730	**Charter & Tracking**
0730 – 0800	**Overview of Measure Phase**
0800 - 0830	**Data Types**
0830 - 0915	**Exploratory Data Analysis**
0915 – 0930	Break
0930 - 1000	**Probability**
1000 - 1030	**Advanced Process Capability**
1030 - 1100	**Overview of Analyze Phase**
1100 – 1115	**Regression**
1115 – 1130	Break
1130 - 1145	**Multivariate**
1145 - 1215	**Logistic Regression**
1215 - 1245	**Statistical vs Practical Significance**
1245 – 1315	Prayer Break/Lunch
1315 – 1330	**Sample Size**
1330 - 1345	**Central Limit Theorem & Confidence Intervals**
1345 - 1415	**ANOVA**
1415 - 1450	**Chi-Square & Contingency Tests**
1450 – 1500	**Recap**
1500	Lunch & End of Day Three

Day 5:	Thursday, 23rd of October 2025
0700 – 0730	**Non-Parametrics**
0730 – 0745	**Overview of Improve**
0745 - 0815	**GB DOE Refresher Minitab**
0815 - 0845	**Fractional Factorial Experiments**
0845 - 0900	**Catapult**
0900 - 0915	**Split Plot Designs**
0915 – 0930	Break
0930 - 1000	**Design for Six Sigma**
1000 - 1030	**Advanced Lean Tools**
1030 - 1045	**Review Implementation & Pilot Improvements**
1045 - 1100	**Acceptance Sampling Plans**
1100 – 1115	**Total Productive Maintenance**
1115 – 1130	Break
1130 - 1145	**Visual Management**
1145 - 1200	**Measurement System Reanalysis**
1200 - 1215	**Control Plan**
1245 – 1315	Prayer Break/Lunch
1315 - 1330	**Sustain Improvements**
1330 – 1345	**Course Conclusion**
1345 - 1445	**POST-TEST**
1445 – 1500	Presentation of Course Certificates
1500	Lunch & End of Course

Practical Sessions

80% of this highly-interactive course is practical sessions. Theory learnt (20%) will be applied using various role-plays, case studies and practical sessions.

Course Coordinator

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