

# Transition 4.0

Training Program Brochure

# Program Introduction

In a world of increasingly unpredictable markets, highly demanding customers, fierce global competition, and rapid innovation of managing internal processes, it's crucial to have strong relationships with suppliers and the distribution network, as they become an indispensable leverage to strengthen the competitiveness of manufacturing and service companies. Today we are at the gates of another change, the fifth industrial revolution. The fast pace of ever more powerful 4.0 technologies, particularly in the ICT, AI and robotics sectors, lead us to create Cyber Physical Systems (CPS) and increasingly advanced IoT devices.

Industry 5.0 is increasingly oriented towards the so called "Collaborative Industry", a business model that evolves on the basis of cooperation between machines and humans, with the ultimate goal of generating added value through custom products. However, the products differentiation can't thrive without the commitment of human capital. The purpose of Industry 5.0 is then to exploit the capabilities of machines to maintain high production volumes by limiting human intervention, hence making the production qualitatively better. The body of knowledge of the Lean Six Sigma for Industry 4.0 course supports this innovation with specialized training contents for procurement, production, distribution and quality departments of any company.

## Program Description

Digital transformation and Transition 4.0 are the technological innovations at the basis of the so-called fourth industrial revolution that is currently underway in many companies.

The objective of this program is to describe these two methodological philosophies to obtain maximum value and help create new business models in the company.

The training objective is to allow professionals who deal with Production, Logistics, Quality, Organization, to have a new and broader vision on the role of operational processes and on the methods of designing and manufacturing products and services.

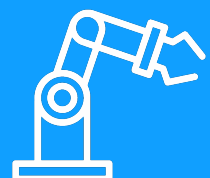
The goal is to disseminate adequate knowledge and guarantee the tools that support companies in their activities towards new paradigms and successes.



Lean Six Sigma Framework



Lean Six Sigma 4.0



Industry 4.0 Innovations



# Target Audience

The Transition 4.0 course has been designed for professionals and managers looking for vertical mobility and new opportunities in their respective sectors. Basic arithmetic and computer skills (rudimentary knowledge of Excel) are essential. In general, the successful completion of any degree program will be sufficient to meet the notional needs of this program. Examples of professionals who can benefit from this program are:

- Continuous Improvement Manager
- Finance & Administration Manager
- Operation Manager
- Plant Director
- Supply Chain Manager
- Process Engineer
- R&D Manager
- Product Engineer
- Material & production planner
- Project Engineer
- Project Manager
- Production Manager
- Quality Engineer
- Business Transformation Manager

## Program Goals

The main objectives of the Transition 4.0 course are the following:

- Provide a new and broader vision of the role of Operations in defining and supporting corporate competitiveness and therefore of the links with other parts of the company (organization, development of new products, purchases, etc.) and with the logistics chain (suppliers, distributors, service centres, etc.) to optimize the overall competitiveness.
- Provide the tools and skills necessary to make the most out of the opportunities of Industry 4.0 and Service 4.0 by guiding investments for maximum efficiency and effectiveness, by improving business performance and ROI.
- Provide specific skills to bring Lean Six Sigma innovations in the company (manufacturing and services) in the of the opportunities provided by 4.0: value flow analysis, review of information flows, efficiency improvement, cost reduction, quality improvement, visual management, relations with suppliers and organizational roles.
- Provide greater sensitivity and knowledge on some general management tools, increasingly relevant in operations management (improvement of iterative processes of production to order and of new product development processes; improvement of coordination and operation of the entire Supply Chain).



# Who is the Six Sigma Management Institute

The Six Sigma Management Institute was founded by Dr. Mikel J. Harry, the co-creator of the Six Sigma methodology. For over 20 years, we have coached hundreds of companies and trained thousands of individuals both with goal of helping them achieve the highest level of performance in their industries and professional careers. During these highly complex and data-driven times, we believe than every individual should be knowledgeable of the frameworks and the tools required to dive deep into data and re-emerge with valuable information, to help their company and themselves achieve breakthrough improvements. SSMI's mission is to provide the necessary frameworks and tools to enable any company enhancing the quality of their products, services and ultimately to increase the satisfaction of their clients.

## Program Creator

Pierfranco Portrandolfo has more than 30 years of experience in the Operation and Manufacturing sector, integrating Continuous Improvement Methodologies and Lean Six Sigma Manufacturing 4.0. He has an incredible amount of experience and successes achieved during the application of engineering and managerial models within the best companies in the world. On these topics Pierfranco has published more than 200 articles and thought hundreds of seminars and training programs.



## Certification Path

In order to obtain the SSMI® Transition 4.0 Certification each and every candidate must complete the following steps:



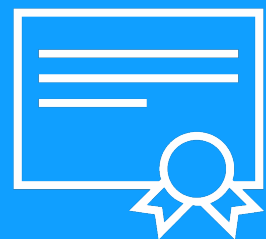
### Live Webinar Training

The total instructional time for the SSMI® Transition 4.0 is 8 days of Live Webinar classes with a frequency of two -days per month.



### Knowledge Assessment Exams

Completion of 4 Knowledge Assessments Exams. Each module assessment comprises of 30 multiple choice questions which participants need to score more than 70%



### SSMI International Certification

Upon the completion of every requirement the candidate will receive the certificate for the SSMI® Transition 4.0 Training Program.



# Program Modules

The course has a duration of 8 days of webinar training. The training is divided in modules and it will take place twice a month, a formula particularly consistent with the normal working activity of the participants. The Project Work will be carried out in parallel with the classroom teaching.

## 1. Transition 4.0

- Industry 4.0: the new architecture
- Essential principles: Cyber-Physical System; Internet of Things (IoT); Internet of Service
- The Smart Factory: technology 4.0 deployment

## 2. Industry 4.0: Machine Learning

- Statistical tools for data analysis
- Prediction Models
- Machine Learning techniques
- Case studies of applied machine learning within Industry 4.0

## 3. Digital Factory: how to create value in a business

- Application fields: manufacturing - new product development - supply chain
- Introduction to Data Science and Artificial Intelligence
- How new digital technologies enhance business value creation
- How to improve Lean Six Sigma framework with new digital technologies

## 4. From Lean Six Sigma to Industry 4.0

- Lean Six Sigma overview: IDOV/DMAIC cycle
- Lean Six Sigma 4.0
- Process monitoring, fault detection, product quality prediction
- How to implement Experimental Design in a 4.0 facility

MARCH		APRIL		MAY	
MODULE 1	MODULE 2	MODULE 3	MODULE 4		
20 – 27 March	3 – 10 April	24 April – 8 May	15 – 29 May		



# Benefits of an SSMI® Lean Six Sigma Certification



## Better Execution

Six Sigma links strategic initiatives to operational improvements to create efficiencies for your business.



## Build Customer loyalty

Six Sigma helps to target your customer needs so you can improve the things that matter most to your customers.



## Create Greater Returns

Six Sigma helps to lower the operational costs and reduce the turnaround time in delivery of products and services to bring about higher customer satisfaction.



## Certifies your Talent

A Lean Six Sigma Certification is the proof that you have the experience and skills to deliver quality service that matches customer expectations.



## Improves your work performance

Professionals with Lean Six Sigma skills earn close to \$120,000 with global opportunities.



## Opens Doors

A Lean Six Sigma credential can get you access to globally renowned companies of your choice.



## Applies Everywhere

Six Sigma Certifications are based on achieving excellence while providing quality services. The concepts and techniques can be adapted to any real-world challenge across industries, market segments and geographies.

## Contact Us

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