Foundation of Lean Manufacturing
Syllabus

Week/Module	Topics
Week 0	• Welcome to the Course • Course Instructor • Course Team • Introduction video • Introduce yourself
Week 1: Observation Skills	• Module Overview • Safety & Cleanliness in Factory • Site Visits for Cleanliness and Safety • Pre-Training test • Seeing Vs Observing • Steps in Observation Process • Introduction of 4W1H format • Language of label writing • Steps in Label Writing • Label Grouping • Unsafe Condition & Unsafe Act • Understanding Hazard & Risk • Summary • Weekend Assessment
Week 2: Evolution of Manufacturing	• Module Overview • History of Craftsmanship • Valuable Lesson and Practical Needs • Challenges of Craftsmanship • Craft Production • Mass Manufacturing • Interchangeable Parts and Assembly Line • Challenges of Mass Manufacturing • Fall of Ford • Rise of Toyota • Lean Principles • Lean Manufacturing • Summary • Weekend Assessment
Week 3: Essential Concepts in Factory	• Module Overview • Business Cycle • Concepts in Procurement

	• Concepts in Production • Concepts in Delivery • Organization of Men • Types of Material • Self-Discipline • Time Management • Teamwork • Brainstorming • Conflict Management • Summary • Weekend Assessment
Week 4: Understanding Lean Operations	• Module Overview • "Operations" • Functional Silos • Drawbacks of Functional Silos • Net Negative of Functional Silos • The Eight "Muda" • Eliminating Muda • Loops in Lean Operations • Process Flow Diagram • Case Study of PFD • Summary • Weekend Assessment
Week 5: Introduction to Flow Management System	• Module Overview • Concept of "Flow" • Time and Motion Study • Takt Time • Origination of Muda • Flow vs Process • Characteristics of Flow • Attributes of Process • Flow and Process in Manufacturing • Flow and Process in Business • Flow of Material • Flow of Information • Summary • Weekend Assessment
Week 6: Visual Mapping of Material Flow	• Module Overview • 5S Methodology • Stages of Flow • Family of VMap's • Introduction to VMapQ • Benefits of VmapQ • Stages in Creating VMapQ • Visualizing Material Flow

	• Visualizing Space Allocation • Visualizing Safety Issues • Guidelines for Creating VmapQ • Creating VmapQ: Step 1 to Step 4 • Creating VmapQ: Step 5 and Step 6 • Creating VmapQ: Step 7 and Step 8 • Creating VmapQ Proposed • Summary • Weekend Assessment

Final Exam Details:

If you wish to obtain a certificate, you must register and take the proctored exam in person at one of the designated exam centres. The registration URL will be announced when the registration form is open. To obtain the certification, you need to fill out the online registration form and pay the exam fee. More details will be provided when the exam registration form is published, including any potential changes. For further information on the exam locations and the conditions associated with filling out the form, please refer to the form.

Grading Policy:

Assessment Type	Weightage
Mid-term & End-term	25%
Final Exam	75%

Certificate Eligibility:

- 40% marks and above in internal assessment (mid-term & end-term)
- 40% marks and above in the final proctored exam

Disclaimer: In order to be eligible for the certificate, you must register for enrolment and exams using the same email ID. If different email IDs are used, you will not be considered eligible for the certificate.