

Course Content of Toyota Production System (Platform – Swayam / NPTEL)



Course layout

Week 1: (1) Manufacturing Excellence

- (2) Global Environment
- (3) Production System
- (4) Operations Strategy
- (5) The Heart of the TPS: Eliminating Waste

Week 2: (1) Principles of Toyota Way

- (2) Culture Behind Toyota Way
- (3) Toyota Way in Action
- (4) Long Term Philosophy
- (5) Create Continuous Flow

Week 3: (1) Pull System

- (2) Leveling Workload
- (3) Get Quality Right the first time
- (4) Standardization of Task
- (5) Use of Visual Control

- Week 4:** (1) Use of Reliable Technology
(2) Role of Leaders in Manufacturing Philosophy
(3) Developing Exceptional Teams
(4) Challenge & Respect Extended Networks
(5) See yourself to understand the situation

- Week 5:** (1) Developing decisions with Consensus
(2) Becoming Learning Organization
(3) Becoming a Learning Organization: Continuous Improvement
(4) Using Toyota Way for other Organization(Service & Technical)
(5) Lean Manufacturing

- Week 6:** (1) Lean Vs Agile Manufacturing
(2) Sustainable Manufacturing-I
(3) Sustainable Manufacturing-II
(4) Flexible Manufacturing System
(5) Benchmarking

- Week 7:** (1) Cultural Issues in Lean
(2) Overview of Lean implementation
(3) Significance of Lead time
(4) Techniques to reduce LT
(5) Value Stream Mapping

- Week 8:** (1) KANBAN Approach
(2) KANBAN Calculation-I
(3) KANBAN Calculation-II
(4) Theory of Constraints
(5) Different Business Excellence Models