

The Flow System – Toyota Production System (LT-M1)

Syllabus

Description of Course

The Toyota Production System (TPS) master's course (LT-M1) is a continuation of the content learned in the Lean Thinking Advanced Course (LT-A1). This course provides a deep dive into the history and operational aspects of the Toyota Production System and The Toyota Way philosophy.

The course covers the pillars of Jidoka, Just-in-Time (JIT), and the foundational aspects of the Toyota Production System and components. It covers the pillars and elements of the Toyota Way and what it means to apply them.

Duration of Training

The Toyota Production System (LT-M1) master's course requires 16 hours of training and can be taken as a two-day in-person training session, an online live virtual class, or as an asynchronous self-paced online training using The Flow System's learning management system (LMS). This course can be taught publicly or privately to any organization.

Participants must complete the training before receiving a code allowing them to take the Toyota Production System (LT-M1) assessment for accreditation. The fee for the assessment is included in the course fee for training attendees.

At the master's level, participants will demonstrate an ability to apply the new knowledge and complete an online assessment. The master's level courses' application portion will be reviewed by peers and industry experts in their chosen field.

Participants who attend the training will have two attempts at the Toyota Production System (LT-M1) assessment. Participants who wish to forgo the training and jump straight to the assessment may do so but must first buy a code and will only have one attempt as opposed to those taking the training. You can buy a code below by clicking 'Take Assessment.'

Objectives of Course

This course is a master's course that continues to build on the material learned from both the Foundations (FS-1) and the Lean Thinking Advanced (LT-A1) courses. As a mastery level course, participants will be required to envision applying the material covered in the course to their place of work. After successfully completing this course participants will be able to:

- Explain the pillars of the system.
- Explain the Toyota Way philosophy that underpins TPS.
- Define the foundational goals of TPS.
- Define the desired outcomes of TPS.
- Describe how to use the elements of the Toyota Way
 - Challenge
 - Kaizen
 - Genchi Genbutsu
 - Respect
 - Teamwork
- Describe how to design and apply Standard Work.
- Explain how to calculate and use Takt Time, Cycle Time, & Lead Time.
- Describe the elements of PDCA.
- Explain the 4Ms.
- Define the 7 wastes in TPS and at least 2 other identified wastes.
- Define 5S and the differences between 4S and 5S.
- Define and explain continuous flow.
- Differentiate between batch and pull systems.
- Explain Kanban in a pull system.
- Explain ANDON, Poka Yoke, & Defect Detection.
- Define Fixed Position Stop and Line Stop.
- Explain leveled workflow and Heijunka.
- Explain the basics of Visual Control and how to apply them.

Outline of Course

- Introductions
- Overview (TFS, TPS, & the Toyota Way)
- The Pillars of the System
- Lean Wastes
- Standardized Work
- Continuous Improvement

Toyota Production System (LT-M1)

- PDCA and Problem Solving
- Basic Lean Metrics
- Toyota Way Components
- Goals and Outcomes

The Flow System Advanced Accreditation

Participants completing the Foundations (FS-1) training (in-person) or the Foundations (FS-1) course (online), or those who wish to only take the Foundations accreditation exam without participating in training or an online course, can take the exam at any time. Participants who complete training (face-to-face or online) will have two attempts at the exam. Participants who wish to forgo any training may do so and pay to take the exam. Participants who skip any training will have one chance to pass the exam. Upon passing the Foundations Exam, participants will receive a Certification of Completion for The Flow System Foundations Course. Once a Certification of Completion for The Flow System Foundations Course has been obtained, participants can continue to any of the Advanced Courses (see Figure 1). The Flow System Training Map can be found in Figure 1 provided below.

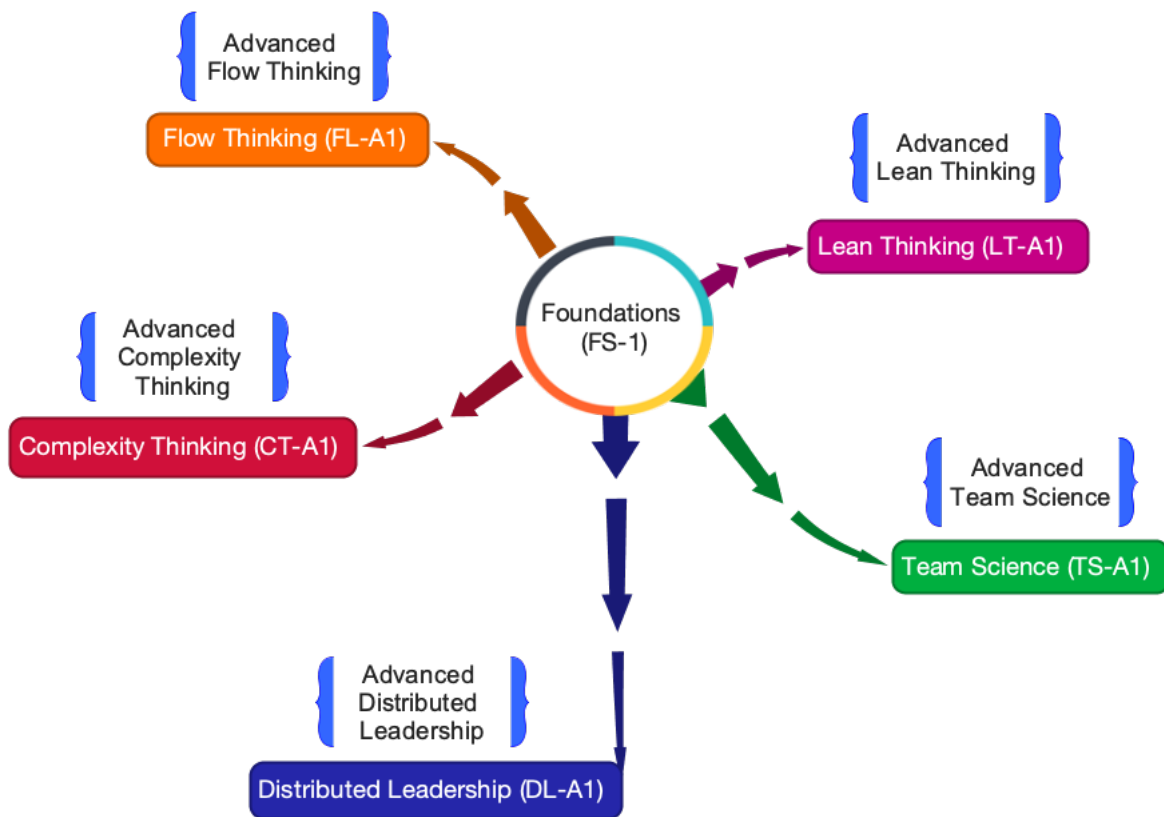


Figure 1: The Flow System Foundations and Advanced Courses

The Flow System Masters Accreditation




There are a total of five master level accreditations to choose from, one to accompany each advanced course. Once the foundations course (FS-1) and the selected advanced course has been successfully completed and the accreditation exam passed, participants can continue to take courses at the master level within the chosen advance track. Participants can only continue to the master level courses after achieving the appropriate advanced accreditation. For example, before taking any of the lean thinking master level courses (LT-M1 through LT-M5), the foundations (FS-1) and lean thinking advanced (LT-A1) courses must first be successfully completed.

The master level courses for the Lean Thinking track include the following courses:

- Toyota Production System (LT-M1)
- Lean Tools & Metrics (LT-M2)
- Ji Kotei Kanketsu (LT-M3)
- A3 Problem Solving (LT-M4)
- On The Job Development (LT-M5)

A master level accreditation in Lean Thinking will include the following path:

1. Mastery Complexity Thinking Accreditation
 - a. Accredited in the Foundations (FS-1) course
 - b. Accredited in the Lean Thinking (LT-A1) Advanced course
 - c. Successful completion of all 5 Mastery Lean Thinking courses
 - i. Toyota Production System (LT-M1)
 - ii. Lean Tools & Metrics (LT-M2)
 - iii. Ji Kotei Kanketsu (LT-M3)
 - iv. A3 Problem Solving (LT-M4)
 - v. On The Job Development (LT-M5)
 - d. Pass Mastery Lean Thinking Accreditation Exam

Courses	Course Completion & Exam	Accreditation
Foundations Course		Foundations Accreditation
Advanced Course Lean Thinking		Advanced Lean Thinking Accreditation
Mastery Lean Courses LT-M1 + LT-M2 + LT-M3 + LT-M4 + LT-M5		Mastery Lean Thinking Accreditation

Trainers

The Flow System Foundations Course (in-person) will be administered by the co-creators of The Flow System and /or by certified TFS trainers. The online courses will only be administrated and monitored by the co-creators of The Flow System. All trainers are considered experts in their field of practice/study and have a command of the materials that are presented in The Flow System Foundations Course.

Recommended Readings

The Flow System Reading Materials include 1) *The Flow System: The Evolution of Agile and Lean Thinking in an Age of Complexity*; 2) *The Flow System Guide*; and 3) *The Flow System: Key Principles and Attributes*.

- 1) *The Flow System: The Evolution of Agile and Lean Thinking in an Age of Complexity*
Available from Amazon.

Hardback:

<https://amzn.com/1680400584/>

Kindle:

<https://amzn.com/B08NXPGMSC/>

- 2) *The Flow System Guide*
Available online (free)
<https://flowguides.org/index.php>

Amazon book (print-to-order)

<https://amzn.com/B085KN39FP>

Amazon Kindle Format

<https://amzn.com/B085PQFXFN/>

- 3) *The Flow System: Key Principles and Attributes*

Amazon book (print-to-order)

<https://amzn.com/B085DQB92N/>

Amazon Kindle Format

<https://amzn.com/B085DHFNMT/>