The Flow System – Lean Thinking Advanced Course (LT-A1)

Syllabus

Description of Course

The Lean Thinking (LT-A1) advanced course explores the history of and the different concepts of the Toyota Production System (TPS) and the Toyota Way. Participants will also be introduced to several lean tools and metrics and will become familiar with Ji Kotei Kanketsu (JKK), A3 Problem Solving, and On the Job Development (OJD).

Duration of Training

The Lean Thinking (LT-A1) advanced 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 Lean Thinking (LT-A1) advanced level assessment for accreditation. The fee for the assessment is included in the course fee for training attendees.

Participants who attend the training will have two attempts at the Lean Thinking (LT-A1) advanced level 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 two for people taking the training. You can buy a code below by clicking 'Take Assessment.'

Objectives of Course

This course is an advanced course in which participants should have an understanding of The Flow System Foundations (FS-1) and must have successfully completed the Foundations assessment. After successfully completing this course participants should be able to:

- Describe the origins of lean thinking.
- Identify the history and development of the Toyota Production System (TPS) and the Toyota Way.
- Describe the components of the TPS:
  - Jidoka
  - Just in Time (JIT)
  - Customer First
  - Respect for Humanity
  - Eliminate Waste
- Describe the components of the Toyota Way:
  - Continuous Improvement
  - Respect for People
  - Genchi Genbutsu
  - Kaizen
  - Challenge
  - Respect
  - Teamwork
- Describe PDCA and its components and uses.
- Create and use a Value Stream Map (VSM).
- Explain batching vs one-piece flow.
- Measure flow in a system.
- Explain and apply 4S/5S.
- Explain and apply the 4-types of Mieruka.
- Understand the basics of Queuing Theory.
- Design and effective team.

Outline of Course

- Introductions
- The Toyota Production System and its history
- Definitions of the Toyota Way and components
- How PDCA works and similarities with Agile and scrum
- Understanding and applying Kaizen
- Genchi Cenbutsu real meaning and use
- Introduction to standard lean tools and metrics
- The pitfalls of batching work and inventory
- Using Lean to design optimal teams
- The Utilization Trap
- Understand Value Stream Mapping (VSM)
- Understand One Piece Flow

- Learn the Lean Wastes
- Understand Context Switching
- Concepts of 4S and 5S
- Learn Mieruka and visual control
- Introduction of Ji Kotei Kanketsu (JKK)
- Introduction to A3 Problem Solving (TBP)
- Introduction to On the Job Development (OJD)

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.
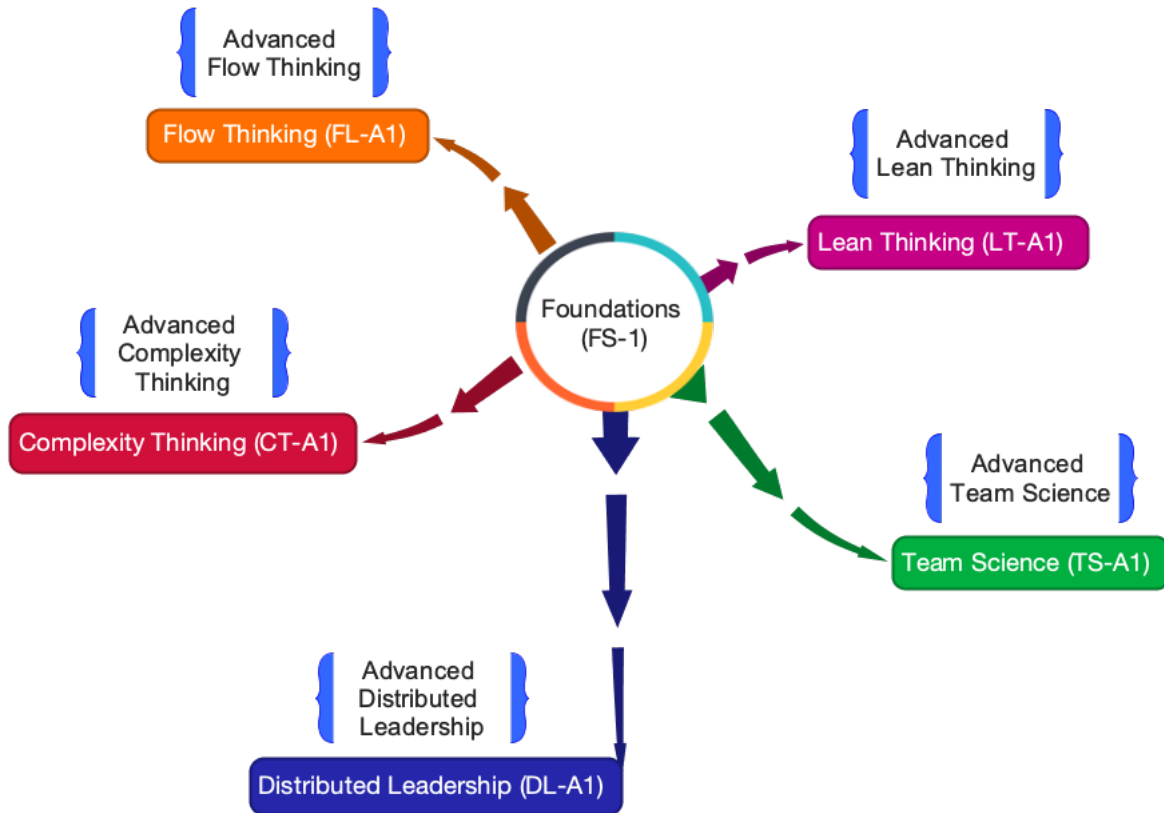
Figure 1: The Flow System Foundations and Advanced Courses

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. Participant 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 advance (LT-A1) course 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 Lean Thinking Certificate of Completion
   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/