



**LEAN CONSTRUCTION PROGRAM, WINTER 2021 COURSES, UNITS 1-7**  
**Courses Begin on Tuesday, January 12 by Zoom Video Conferencing**  
**Two Course Registration Options**

**A) Register for Units 1-4 or B) Register for Units 1-7**  
**TUESDAYS & THURSDAYS, NOON TO 3:00 PM**

**UNIT 1: VARIATION IN PRODUCTION SYSTEMS**

**Tuesday, Jan. 12, Thursday, Jan. 14, Tuesday, Jan. 19, 2021 | Noon-3:00 pm**

Unit 1 helps participants recognize sources of variation on their own projects, examine variation's effect on operations, and mitigate the effects of variation in their every-day work.

**Participants upon course completion will be able to:**

- Define the different types of variation;
- Explain the concept of throughput and distinguish it from productivity;
- Discuss the role of variation in production operations;
- List sources of variation in construction settings;
- Explain and contrast variation mitigation techniques.

**UNIT 2: PULL IN PRODUCTION**

**Tuesday, Jan. 12, Thursday, Jan. 14, Tuesday, Jan. 19, 2021 | Noon-3:00 pm**

Unit 2 introduces the concept of pull as a means to reliable workflow.

**Participants upon course completion will be able to:**

- Compare batch-and-queue and continuous-flow production systems;
- Distinguish push systems from pull systems;
- Describe the impact of pull on production systems;

**UNIT 3: LEAN WORKSTRUCTURING**

**Thursday, Jan. 21, Tuesday, Jan. 26, Thursday, Jan. 28, 2021 | Noon-3:00 pm**

Unit 3 provides tools needed to apply Lean Workstructuring principles within the Last Planner® System.

**Participants upon course completion will be able to:**

- Apply the methods and tools utilized in pull planning;
- Describe the concept of Lean Workstructuring;
- Outline the desired products of Lean Workstructuring;
- Describe the characteristics and application of the Last Planner® System.

**UNIT 4: THE LAST PLANNER® SYSTEMS**

**Thursday, Jan. 21, Tuesday, Jan. 26, Thursday, Jan. 28, 2021 | Noon-3:00 pm**

Unit 4 shows how to conduct make-ready and weekly work planning sessions.

**Participants upon course completion will be able to:**

- Apply the Last Planner® System on a project;
- Hold make-ready and weekly work planning sessions;
- Calculate, track and analyze percent plan complete for a project.

## **UNIT 5: LEAN SUPPLY CHAIN & ASSEMBLY**

**Tuesday, Feb. 2, Thursday, Feb. 4, 2021 | Noon-3:00 pm**

Unit 5 introduces the lean strategies and tools used to deliver materials, equipment and prefabricated assemblies to the jobsite in a manner that facilitates flow.

### **Participants upon course completion will be able to:**

- Differentiate between traditional procurement practices and lean supply chain applications;
- Identify waste and value-adding activities within the supply chain and assembly;
- Evaluate the impact of using lean supply chain on waste elimination, continuous flow and site operations pull;
- Identify strategies needed at the project and company levels to support the lean supply chain;
- List examples of process improvements to the lean supply chain;
- Expand lean beyond the individual project;
- Create a value stream map to diagnose and improve the supply chain.

## **UNIT 6: LEAN DESIGN AND PRE-CONSTRUCTION**

**Tuesday, Feb. 9, Thursday, Feb. 11, 2021 | Noon-3:00 pm**

Unit 6 introduces you to the concepts of value-based management, lean in the design process and relational contracting.

### **Participants upon course completion will be able to:**

- Distinguish between the varying definitions for design;
- Define value and commonly used methods to maximize it;
- Discuss waste and commonly used methods to minimize it;
- Differentiate between traditional project methods and lean design;
- Explain the various lean tools used in design and how to deploy them.

## **UNIT 7: PROBLEM-SOLVING PRINCIPLES AND TOOLS**

**Tuesday, Feb. 23, Thursday, Feb. 25, 2021 | Noon-3:00 pm**

Unit 7 describes the Lean Problem-Solving Process and illustrates how to use tools to solve problems in a lean manner.

### **Participants upon course completion will be able to:**

- Define the difference between traditional and lean problem solving;
- Describe how to create a team environment to solve problems;
- Explain how to create trust to avoid problems;
- Describe Observation Walks;
- Identify root causes of problems.

## **EXAM PREPARATION**

**Tuesday, March 2, 2020 | Noon-3:00 pm**

***Registrants must attend each class to receive credit for the unit.***



**LEAN CONSTRUCTION PROGRAM, WINTER 2021 COURSES, UNITS 1-7**

**REGISTRATION:**

[Register On-line here](#)

or complete 2 pages below and return by e-mail to; [jwilhelm@ctconstruction.org](mailto:jwilhelm@ctconstruction.org)

**REGISTER FOR: A) COURSE UNITS 1-4, OR B) COURSE UNITS 1-7, TUESDAYS & THURSDAYS**

**A) Units 1-4, Cost: \$1,200 per person - members | Cost: \$1,400 per person - non-members**

**B) Units 1-7, Cost: \$2,550 per person - members | Cost: \$2,700 per person - non-members**

*Cost (includes 6.35% CT sales tax)*

Contact Name: \_\_\_\_\_ Company Name: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_ Phone: \_\_\_\_\_

**Names of Attendees:**

**E-Mail Address**

**A 1-4 B 1-7**



**LEAN CONSTRUCTION PROGRAM, WINTER 2021 COURSE SCHEDULE, UNITS 1-7**

**Unit 1:** Variaton in Production Systems, January 12, 14, & 19, 2021

**Unit 2:** Pull in Production, January 12, 14, & 19, 2021

**Unit 3:** Lean Workstrucuring, January 21, 26, & 28, 2021

**Unit 4:** The Last Planner® Systems, January 21, 26, & 28, 2021

**Unit 5:** Lean Supply Chain & Assembly, February 2 & 4, 2021

**Unit 6:** Lean Design and Pre-Construction, February 9 & 11, 2021

**Unit 7:** Problem-Solving Principles and Tools, February 23 & 25, 2021

Exam Preparation, March 2, 2021

## LEAN CONSTRUCTION PROGRAM, WINTER 2021 COURSES, UNITS 1-7

Link To Zoom Video Conferencing Classes will be sent from ASKM and Associates upon Registration

### PAYMENT

**A) COURSE UNITS 1-4:** \_\_\_\_ Number Registered \$ \_\_\_\_ Total Cost

**B) COURSE UNITS 1-7:** \_\_\_\_ Number Registered \$ \_\_\_\_ Total Cost

\_\_\_\_ Please send Invoice (**members only**) \_\_\_\_ Payment Mailed  
\_\_\_\_ Credit Card Payment

**Send checks to:** AGC of Connecticut, 912 Silas Deane Highway, Suite 112, Wethersfield, CT 06109

### CREDIT CARD AUTHORIZATION

**Total Amount Due:** \$ \_\_\_\_ | **Credit Card Type:** \_\_\_\_ Visa \_\_\_\_ AMEX \_\_\_\_ MasterCard

Cardholder Name \_\_\_\_\_

Card Number \_\_\_\_\_ | Expiration Date \_\_\_\_\_

Zip Code \_\_\_\_\_ | CVV2 \_\_\_\_\_ (3 digit number on back of Visa, AMEX, MC)

Card Billing Address \_\_\_\_\_  
\_\_\_\_\_

**Please do not email or mail credit card authorization.  
Contact Kathy Bergamo to make credit card payments at: 860-529-6855**

Cancellation policy: Full refunds will be made for cancellations received **14 calendar days before the first day of class.** After that date, no refunds will be granted. Replacements accepted.

For more information about the program, contact John Butts at [jbutts@ctconstruction.org](mailto:jbutts@ctconstruction.org)  
For more information about registration, contact John Wilhelm at [jwilhelm@ctconstruction.org](mailto:jwilhelm@ctconstruction.org)