LEAN CONSTRUCTION UNIT 7:
PROBLEM-SOLVING PRINCIPLES & TOOLS

THE LEAN EDUCATION PROGRAM
Everyone related to the construction process has incentive to get the project done faster and at a lower cost - from the project owners who want to see tangible results for their investment to the contractors and designers who want to do their job well and move on to the next project. Lean Construction is based on the holistic pursuit of continuous improvements aimed at minimizing costs and maximizing value on a construction project: planning, design, construction, activation, operations, maintenance, salvaging, and recycling.

To help contractors develop the knowledge needed to build lean, the Associated General Contractors of America developed the Lean Construction Education Program. Construction professionals at all experience levels, will learn the building blocks necessary to transform their projects and companies into a lean operating system.

THIS COURSE
This seven hour, instructor-led course describes the Lean Problem Solving Process and illustrates how to use tools to solve problems in a lean manner. Following this course, you 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.

EARN YOUR LEAN CREDENTIAL
Following completion of all seven units of the Lean Construction program, participants will be qualified to sit for an exam to earn AGC’s Certificate of Management - Lean Construction (CM-LC).

WHO SHOULD ATTEND:
Contractors, construction managers, suppliers, service providers and professionals seeking additional information about the Lean process, or those interested obtaining their CM-Lean certificate.

The seven-unit series is intended for those individuals who will design and implement a lean transformation strategy within an organization. This course provides 7 hours of instruction in a 35-hour program developed to help you obtain AGC’s Certificate of Management - Lean (CM-Lean).

CM-Lean exams are currently offered monthly in Michigan for those who qualify to sit for the exam.

Cost: (Includes text and meals)
- $450/AGC Member
- $410/Student Chapter / CLC member
- $550/CIAP Member
- $700/Non-Member

Registration Deadline:
March 27, 2020
COURSE SCHEDULE

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<td>8:00 a.m.</td>
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<td>Welcome/Overview</td>
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<td>8:15 a.m.</td>
<td>10:45 a.m.</td>
<td>Team Problem Solving</td>
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<td>Break</td>
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<td>Problem Solving Tools</td>
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COURSE FACILITATOR:

Dr. Tariq Abdelhamid, CM-Lean

The facilitator for this 7-hour course will be Dr. Tariq Abdelhamid, CM-Lean. Tariq is Chief Lean Performance Officer with the Residential and Hospitality (RHS) Division at Michigan State University (MSU), where he is working with colleagues on a transformation journey to adopt Lean Thinking throughout RHS. He also holds an Associate Professor of Lean Construction appointment at the School of Planning, Design and Construction (MSU), where he teaches, conducts research, and routinely publishes on Lean Construction. Tariq served as the Lean/IPD Coach for the Shaw Hall Dining Renovation project at MSU (Jan 2013), the first Integrated Lean Project Delivery project at a public university in the United States. Tariq also worked with the MSU Infrastructure Planning and Facilities group on a 3-year process improvement initiative titled Excellence in Campus Operations and Services. Trained by Greg Howell and Glenn Ballard (founders of the Lean Construction Institute (LCI), USA), Tariq serves as chairperson of the LCI Academic Forum, is the Editor of the Lean Construction Journal since its inception in 2003, and is an LCI Research Fellow since 2016. He is also a Steering Committee member of the Lean in the Public Sector (LIPS) organizations (http://leaninpublicsector.org/). Tariq was a member of the first AGC Lean Construction Steering Committee, and he was also involved as a subject matter expert and content developer in the AGC of America Lean Construction Education Program (2009-2013). Tariq also works with Yokoten Consulting, Enovio Consulting, ReAlignment Group, and Gemba Kaizen Consulting on Lean Construction and Integrated Lean Project Delivery engagements with design and construction teams on projects of any budget size. Prior to joining MSU, he was trained and worked as a Lean Production subject matter expert for Ford Motor Company. He also worked as a Scheduler/Planner for PAC Project Advisors, and an Engineer III for the University of Michigan Construction Engineering and Management Office.

AIA Continuing Education Provider

The Associated General Contractors of America (AGC) is a Registered Provider with The American Institute of Architects Continuing Education Systems. Credit earned on completion of this program will be reported to CES Records for AIA members. Certificates of completion for non-AIA members are available on request.

GBCI CMP

The U.S. Green Building Council (USGBC) developed Leadership in Energy and Environmental Design (LEED®) Green Building Rating Systems for different applications, such as New Construction and Major Renovations, Commercial Interiors, Core and Shell, and Homes. The USGBC Education Provider Program has approved the technical and instructional quality of this course.

FOR MORE INFORMATION CONTACT:
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