Curriculum

LEAN ENTERPRISES

The introductory module in which the rudiments of value stream mapping, policy deployment and A3 thinking are covered along with simulations that facilitate in-depth thinking about operational excellence. Understanding operational excellence and project readiness are key learning outcomes.

VALUE STREAM MANAGEMENT

The notion of understanding, mapping and managing value streams is critical to achieving operational excellence. In this module we cover current and future state value stream mapping for services and manufacturing in depth using both real processes and simulation. We also delve into A3 thinking and the use of the A3 to lead, manage, solve problems, communicate and influence. Key learning outcomes are using value stream mapping and A3 processes to manage value streams.

DATA ANALYSIS FOR OPERATIONAL EXCELLENCE

Provides a manager's eye view of probability and statistics including hypothesis testing, inference and multivariate statistics. Key learning outcome is thinking about problems with rigor.

STABILIZING OPERATIONS

Stability facilitates the application of Plan-Do-Check-Adjust cycle to process improvements of all kinds. The focus of this module is on creating and sustaining standard work; managing changeovers; visual management; 5S; and Total Productive Maintenance. We also link these approaches to strategic issues. Key learning outcomes include mastery of the concepts necessary to establish stability in operations.

SIX SIGMA

Designed to familiarize students with the Six Sigma process improvement methodology and to provide them an opportunity to practice using Six Sigma Black Belt tools.

CREATING AND MANAGING FLOW

This class will cover flow in both service and manufacturing environments. We will consider questions such as how to achieve patient flow in a hospital; and whether Materials Requirements Planning systems and flow processes can co-exist.

LEADING OPERATIONS

The work of leaders often changes in an operationally excellent organization. This module includes how to establish metrics and accountability to those metrics, standard work for leaders and a lean management system. Key learning outcomes are a set of management principles for operational excellence.

SUPPLY CHAIN EXCELLENCE

This content specifically focuses on understanding process challenges beyond organizational boundaries with a specific focus on supply chain processes and decisions. We will look at the several challenges and countermeasures when managing processes and systems that encompass different cultural and organizational identities. Specifically, the students will understand how to design appropriate supply chains consistent with their organization's strategy, how to develop strategic relationships across value chains, and how to manage psychological and social behaviors in supply chain relationships.

CHANGE AND INNOVATION FOR OPERATIONAL EXCELLENCE

Thinking differently about products and processes is important work in the operationally excellent organization. We cover an array of topics related to thinking differently including value stream accounting, lean product design, the 3P process and managing the innovation process. Key learning outcomes include skills for managing innovation and establishing

MANAGING THE EXTENDED VALUE STREAM

Managing key suppliers toward operational excellence and managing across multiple suppliers are important concepts in achieving operational excellence for any organization. This module focuses on managing processes that are largely external to the organization. Key learning outcomes are how to assess suppliers, establish accountability and discover optimal approaches across the supply chain.

FINANCE

Finance is the language of business. It must take the needs/wants from other functions and translate those to what it means for the company. Top performing companies will see Finance "cross-pollinate" across various functions to learn and disseminate new thinking. Because of this, many firms have Finance run the strategy process, are integral to the planning/decision making process and be one of the few external faces of the company. Finance is more than saying "no" to investment requests, doing "data analysis" or just providing reports. Being good at finance helps company become a better/faster decision maker, act as true business partner, drive action to results, and operate with an ownership mentality.

TRANSFORMATION LEADERSHIP

This course guides participants through a comprehensive exploration of various leadership styles. Key topics include critical thinking, fostering a positive organizational culture, and understanding the dynamics of growth and fixed mindsets. Participants will also learn to distinguish between transactional and transformational leadership, equipping them with the skills to drive meaningful change within their organizations.

GEMBA

This session will focus on product and process innovation and the ways that such innovation can be managed successfully, noting the importance of linking product and process design. We will visit organizations and observe examples of innovative practices in healthcare, financial services, and manufacturing. We will see examples of episodic major innovation (radical and disruptive) and the daily innovation (incremental and derivative) that we practice regularly. More importantly, we will observe the ways that innovation is managed as a process and the role of people in making these changes. From observation and reflection, students will develop a deeper understanding of how to identify, prepare and develop the four capabilities as they apply innovation.

CAPSTONE PROJECT

Students, in consultation with their sponsor and MBOE faculty, will focus their improvement projects on a specific value stream. The value stream selection will be driven by current performance gaps in the student's organization and should be aligned with the company's broader strategic objectives. Leading a team within their own organization, students will complete four, three-month improvement cycles over the course of the program. The key learning outcome is how to apply in practice what has been learned conceptually.