

# Bemidji State University

## TADT 4867: Lean Principles and Practices

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 0

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course teaches the principles and practical application of Lean methods and tools as they would apply in various types of organizational value streams allowing for continuously improving operational performances that are fast, flexible, focused and organizationally inclusive for all stakeholders.

Prerequisites: Junior status or consent of the instructor.

### B. COURSE EFFECTIVE DATES: 08/22/2016 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Employee engagement strategies for inculcating Lean continuous improvement methodologies in support of achieving organizational performance goals and objectives.
2. The application of Plan-Do-Check-Act and A3 methodologies to support future state value stream improvements.
3. The study of organizational process value streams utilizing the current state value stream mapping process and analysis tools specific to identifying opportunities for future state improvement

### D. LEARNING OUTCOMES (General)

1. practice principles of the Lean to solve technological problems.
2. explain the economic and environmental benefits of adopting Lean practices in a variety of engineering/manufacturing/construction applications.
3. describe the principles of Lean from a materials and processes perspective in engineering/manufacturing/construction applications.
4. analyze the components of Lean.
5. compare applications of the Lean used in engineering, manufacturing or construction applications.
6. synthesize potential applications for Lean.

### E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted