



**THE OHIO STATE UNIVERSITY**  
COLLEGE OF ENGINEERING

# Lean Six Sigma Foundations

## ENGRTEC 4250

**Credit Hours:**

3.00

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**Course Levels:**

Undergraduate (1000-5000 level)

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**Course Components:**

Lecture

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**Course Description:**

This course will provide a broad exposure to topics in quality improvement that encompass the body of knowledge for Six Sigma Green Belts in both manufacturing and service industries, including hospitals, banks and retailers. Essential concepts, practices, methods and tools for quality improvement, lean management, and effective teamwork are examined, along with the Six Sigma DMAIC methodology.

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**Prerequisites and Co-requisites:**

Pre-reqs or Co-reqs: 3800, STATS 3440

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**Course Goals / Objectives:**

- Students will gain insight into contemporary issues in the Quality Improvement and Assurance field
  - Students will demonstrate knowledge and mastery of the Lean Six Sigma Green Belt level course matter via oral and/or written assignments
  - Students will complete a Lean Six Sigma project case study that allows them to integrate the knowledge gained throughout the course
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**Course Topics:**

- Lean Six Sigma Overview
  - Define Phase
  - Measure Phase
  - Analyze Phase
  - Improve Phase
  - Control Phase
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**Designation:**

Required