# CERTIFICATE IN LEAN SIX SIGMA – GREEN BELT

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Lean Six Sigma is a set of management techniques intended to improve business processes by greatly reducing the probability that an error or defect will occur. Many employers seek personnel with Six Sigma training. This certificate program, offered through the School of Computing and Engineering, is designed to acknowledge the effort students make to learn the DMAIC (Define-Measure-Analyze-Improve-Control) phases of Six Sigma. Interested students in any undergraduate program who successfully complete three required courses with a minimum grade of C- are eligible to receive the Lean Six Sigma certificate. Course completion includes the application of knowledge in a real-world project.

## Learning Objectives

1. Analyze different production systems by determining and formulating performance measures, and making appropriate assumptions for performance optimization.
2. Apply Lean technique to improve the efficiency of a process by empowering people, instilling a culture of continuous improvement and eliminating waste.
3. Study the theoretical principles of DMAIC (Define-Measure-Analyze-Improve-Control) approach in Six Sigma.
4. Integrate principles of Production Systems, Lean Systems, and DMAIC steps to complete a team-based real-life Lean Six Sigma project.

## Lean Six Sigma – Green Belt Program of Study

Students pursuing this certificate take a total of three courses (9 credits) as outlined below.

| Code | Title | Credits |
| --- | --- | --- |
| **Required** | | |
| IER 220 | Production Systems (MER 225) | 3 |
| IER 230 | Lean Systems Engineering (MER 235) | 3 |
| IER 375 | Statistical Process Control | 3 |
| **Total Credits** | | **9** |