



# Thesis Projects (MIE498 H/Y) 2018–2019

**Title/Topic:** Quality Control and Improvement Using Lean Six Sigma Approach

**Description:**

The objective of this thesis is to learn in depth lean six sigma approaches and methodologies for quality improvement in organizations. This would include the study from the books, thorough literature review in this area, and analysis of two interesting published case studies.

Quality data will be analyzed applying DMAIC which includes SPC tools, quality cost analysis, process capability analysis and DE. Minitab software and Matlab will be used for data analysis.

The project is suitable for one or several Industrial Engineering or Mechanical Manufacturing students (UG thesis group project) who performed well in MIE364S.

**Note:** *In addition to the listed topic, topics in the areas of process/quality control and improvement, maintenance, reliability, production and inventory control, including theoretical problems in the stochastic OR area or engineering statistics for students considering graduate studies are possible. Interested students should contact Prof. Makis.*