**Department of Industrial and Mechanical Engineering** 

# **Project I Description**

# Project Name: Design of a restaurant using an industrial engineering approach

### Sponsor:

#### **Project Overview**

The objective of this project is to design a health food restaurant using current industrial engineering tools and practices. This includes

- creating a simplified menu with the aim of optimizing operations and prices
- determining the average gross profit per customer,
- evaluating different location alternatives and selecting best alternative based on cost and potential for attracting customers,
- designing a facility layout that promotes flow of customers while reducing the amount of distance employees must travel,
- determining service requirements including number of waiters and other personnel needed for proper operation,
- and analyzing local food supply chains.

# **Project Areas**

Facility planning, lean techniques, engineering economy, supply chain.

#### **Project Deliverables**

- menu and average gross profit per customer
- facility layout
- service and personnel requirements
- cost benefit analysis

# Team Size and Majors needed

INE: 4 students