

Fall 2020

IE 443-101: Senior Project I

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COURSE OUTLINE
IE 443/444; Senior Project I/II
Fall 2020- Spring 2021

Instructor: Dr. Layek Malek
Office : Mech. 302
Phone : 973 596 3648
Office Hours: Tuesday & Thursday 4:30-5:30 and by Appointment

Objective

The senior project provides students with hands on experience where they are assigned a problem in a factory, service facility, hospital, etc. Teams of 3-4 students are assigned a project for two semesters with an industrial partner; such students are supervised by both a faculty member and a member of technical staff from industry. The expectation for this year's IE 443 is as follows;

- Students form groups consisting of 3 or 4 members and elect a group representative
- By the 2nd week of the semesters groups are expected to select from the list of projects the one of their interest
- By the 3rd week students visit the facility to collect the needed information and consult with industrial personnel
- A road map is presented by the students to the faculty and the industrial partner for their suggestions and approval (By the 4th week)
- Progress reports are made thereafter on a bi-weekly basis to the professor and the industrial partner in which the necessary literature search is presented and the data required are collected.
- In the last week of classes each group will submit a preliminary report and make presentation to show the approach that will be followed to address the final objective of the projects and progress made towards that end. Industrial standards used as well as constraints should be emphasized.

Grading

Each member of a group will usually get the same grade. When joining a group synergy among its member is expected. Interim progress reports will count for 1/3 of the semester's grade, the preliminary reports will count for 1/3, and the presentation for the other 1/3.

Class operation*

After the two introductory weeks, each group will meet individually at least once every two weeks to discuss progress made and seek advice to move forward. The meeting time will be arranged according to each group and the instructor's convenience.

*This fall, because of COVID-19 group visits to industrial partners should be limited to minimum and when done CDC guidance should be strictly followed. Also, the biweekly meetings with the instructor will mostly be conducted virtually.

2020/ 2021 Projects (Project description attached)

