

**Project 3 ME EN 51/6184**  
**Due Nov 21 9am**

You work for a consulting firm and have been assigned to help Malwart work on their scheduling. To meet the prescribed work loads, Malwart spends on average 500 hours of overtime. At 1.5 times the employee cost and benefits, the extra money is estimated to be about \$9,000 a week. You have been asked to propose an optimal work alignment system.

The computer scientists for your company have developed a webportal where employees submit their available work times and managers submit the required number of employees (minimum) of each time for each hour of the week. The output from the file is in Project3data.xlsx. The data from this file should be fairly explanatory and there are about 100 employees.

Your job is to develop an optimized work schedule for all the employees that meet their minimum and maximum requested hours and the company's requirements. You also have to present your results in an executive summary and a technical report.

As this is a proof of concept, you do not need to have people scheduled in blocks. I will give 3 points of extra credit if you get the employees scheduled in blocks. That is, if an employee starts, they stay working until they leave. I will not give any help on this question. I will discuss it lightly in class.

Grading 20% Executive Summary, 25% Technical Report, 55% to the correctness of your solution.